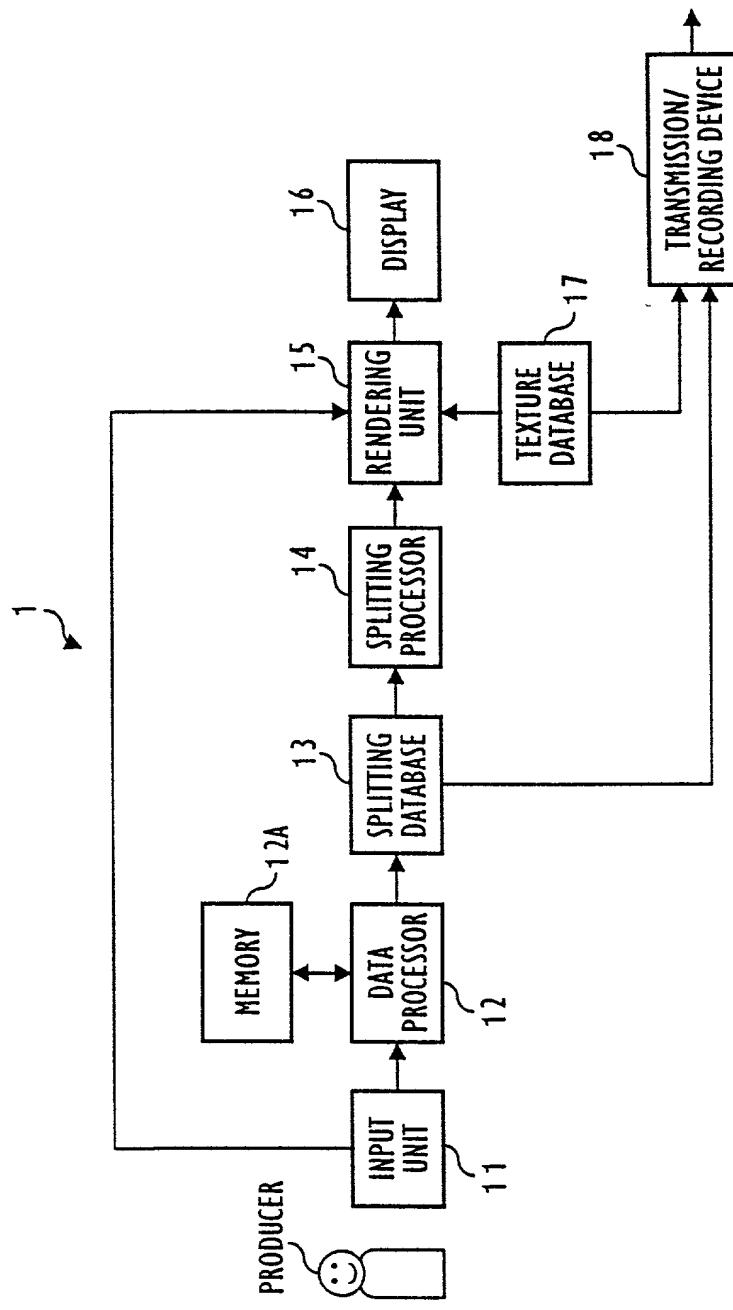


FIG. 1

FIG. 2



7,062,800 Filed 2/24/03

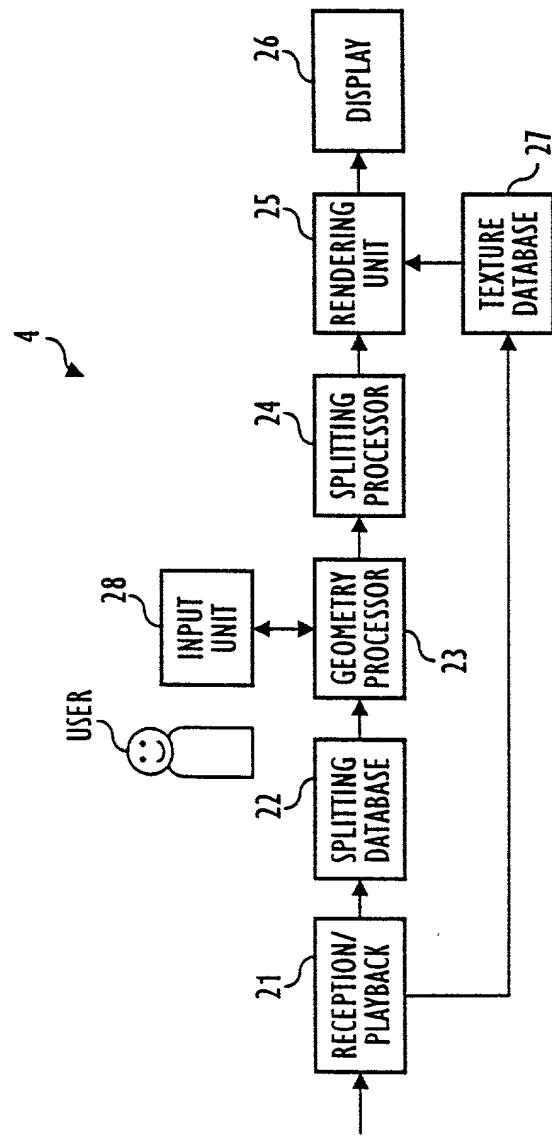


FIG. 3

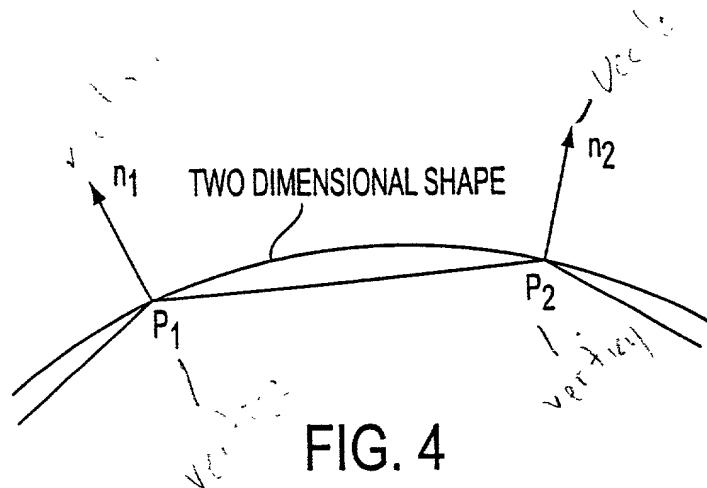


FIG. 4

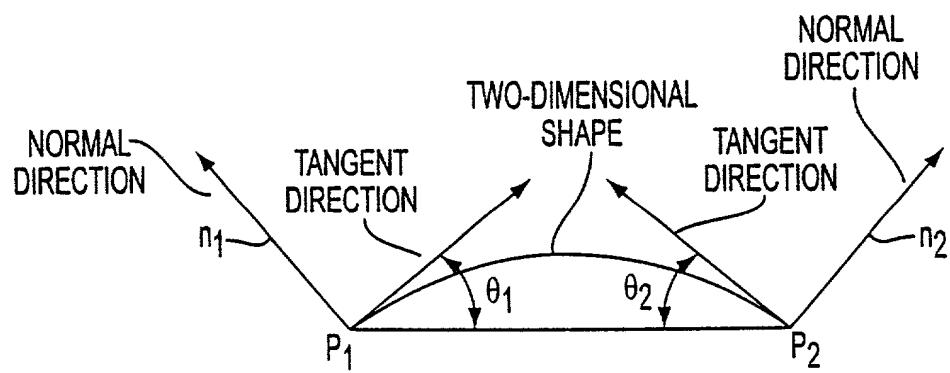


FIG. 5

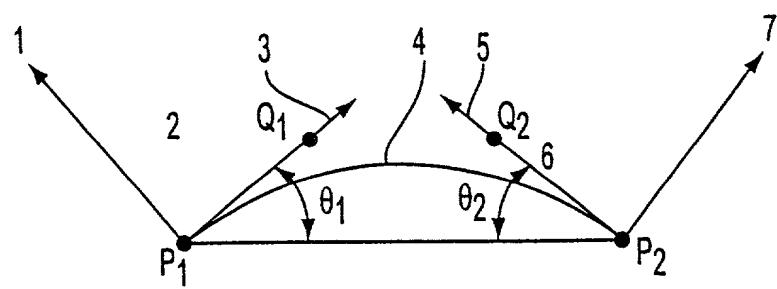


FIG. 6

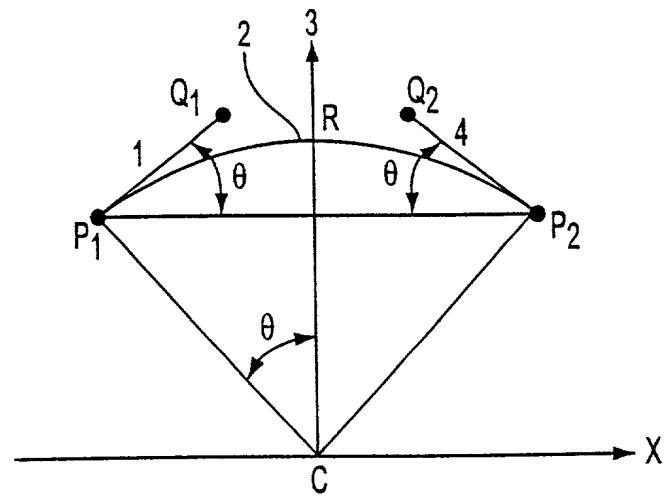


FIG. 7

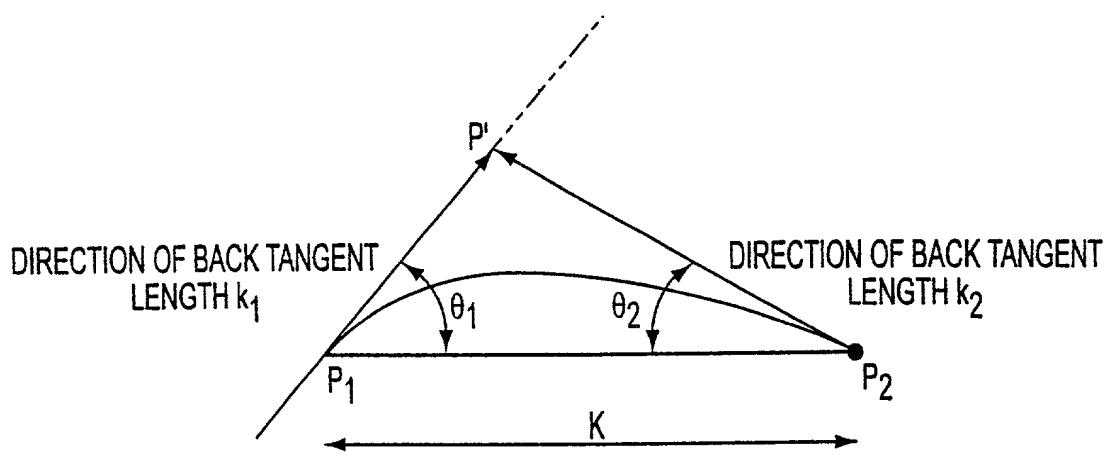


FIG. 8A

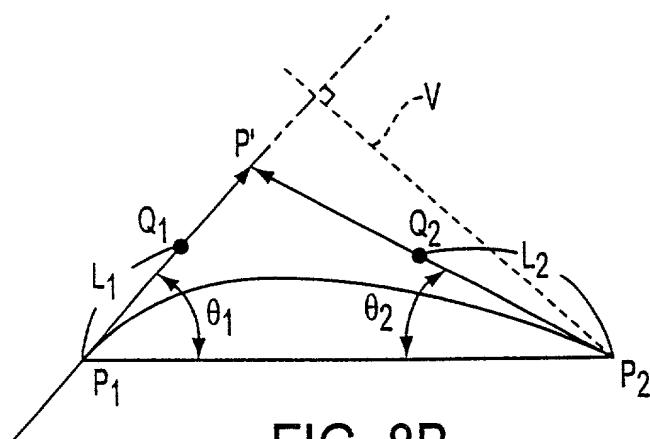


FIG. 8B

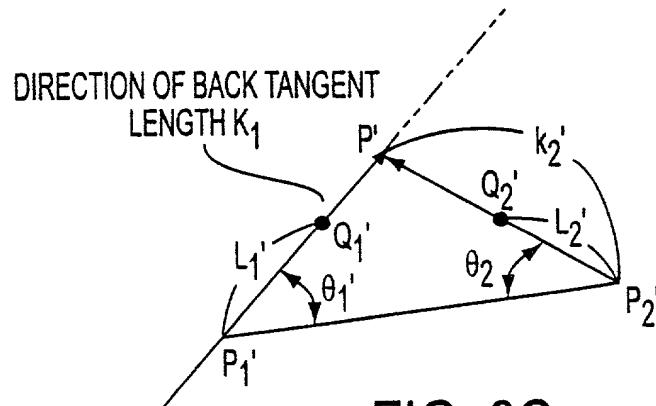


FIG. 8C

CONTROL POINT COMPUTATION PROCESSING

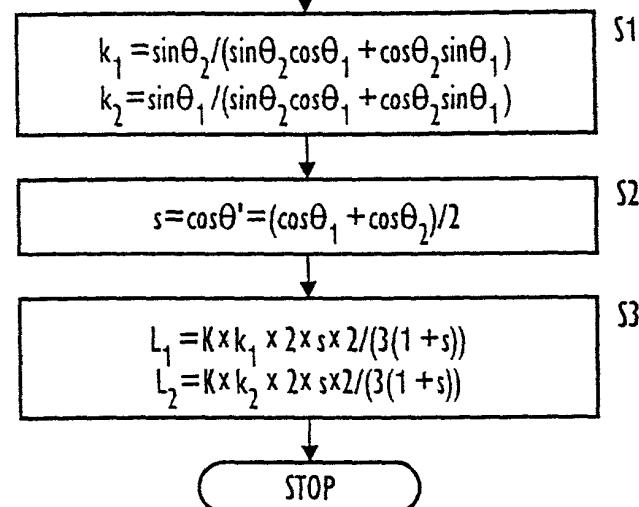


FIG. 9

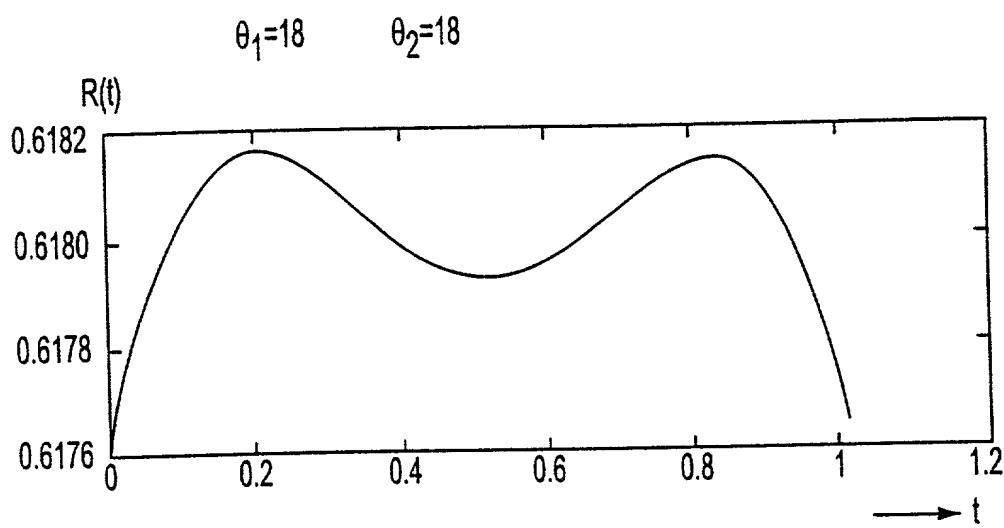


FIG. 10A

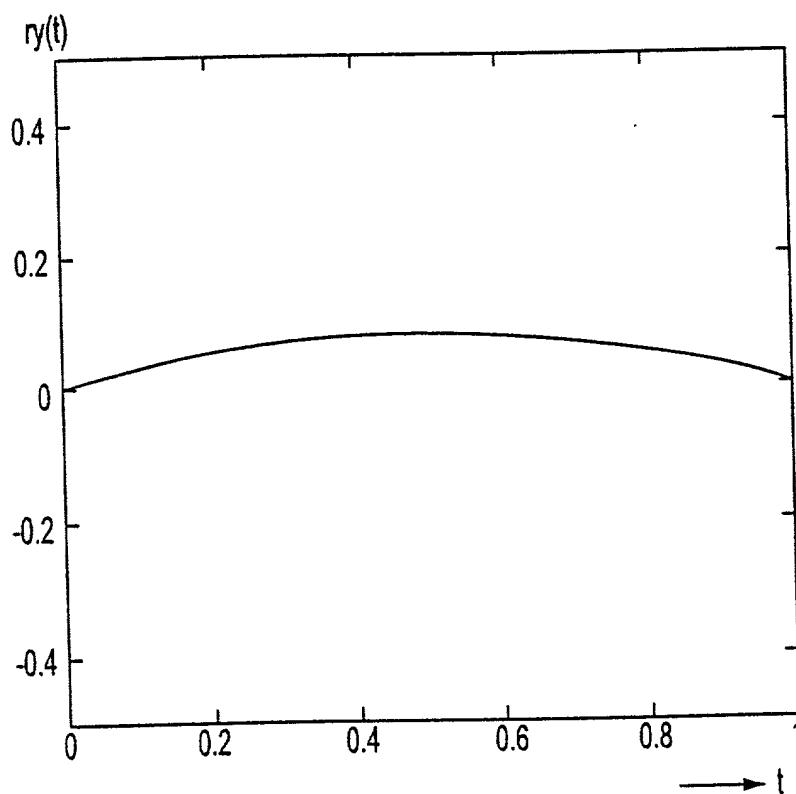


FIG. 10B

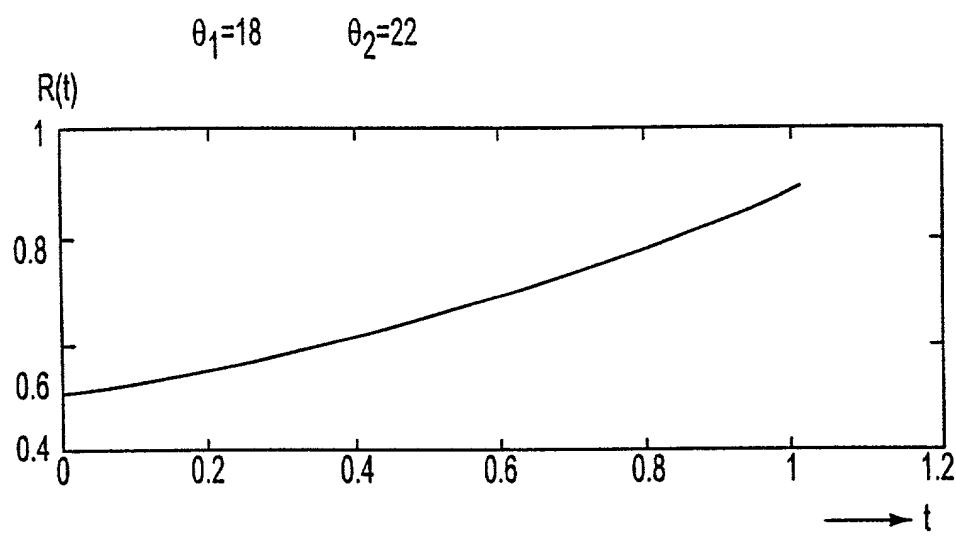


FIG. 11A

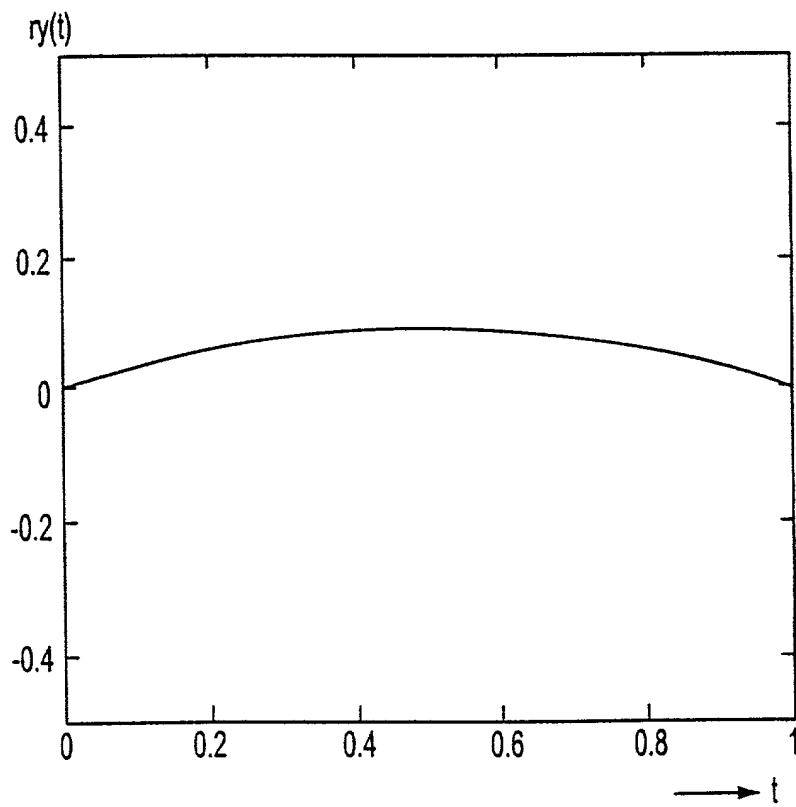


FIG. 11B

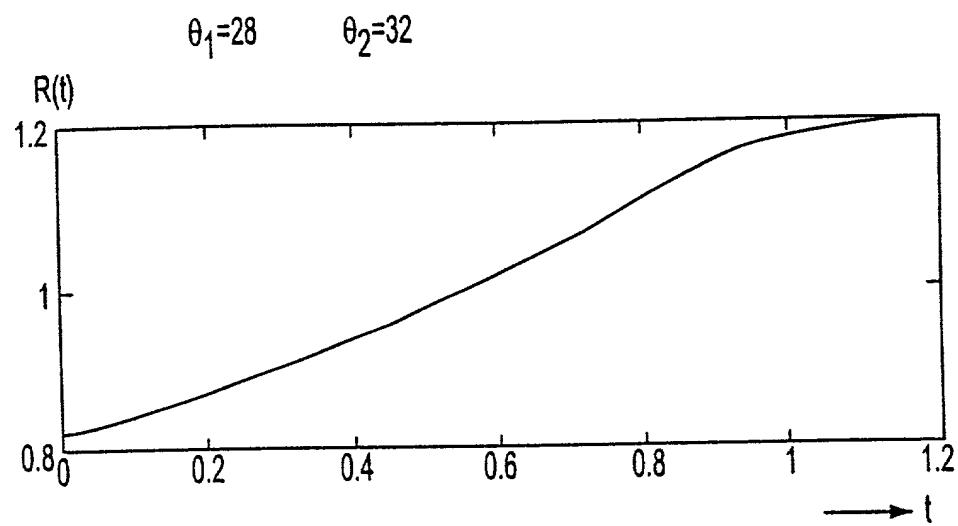


FIG. 12A

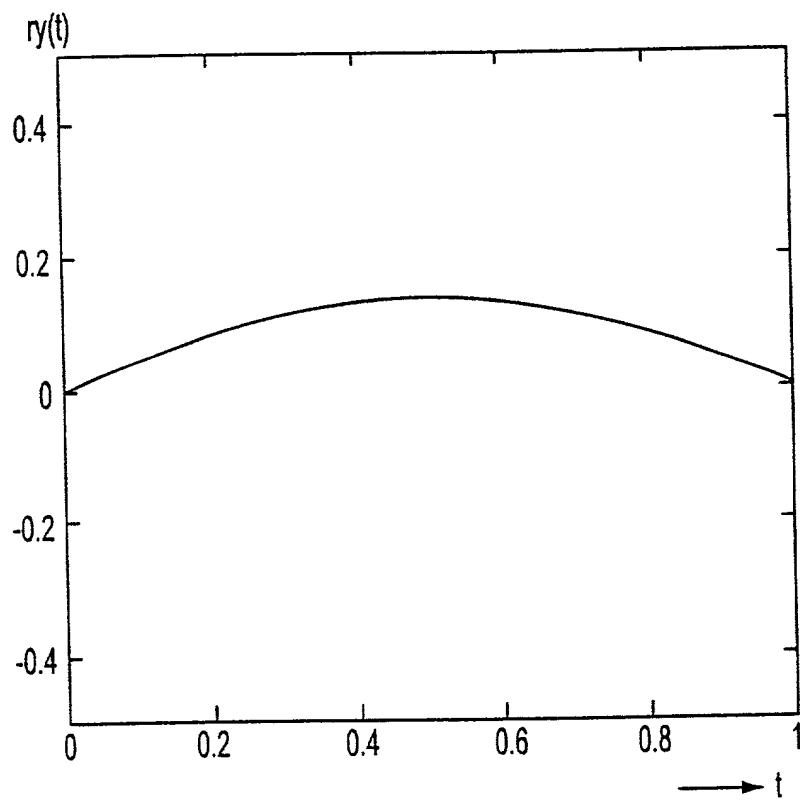


FIG. 12B

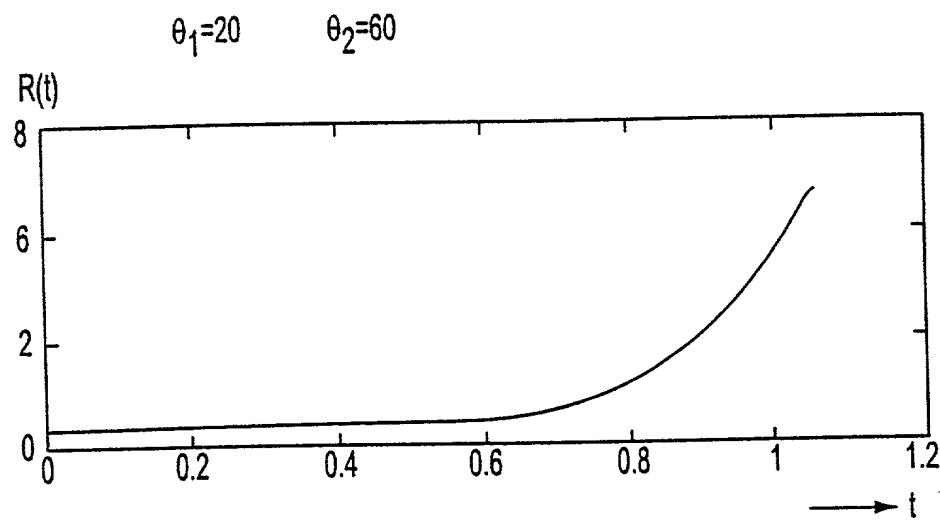


FIG. 13A

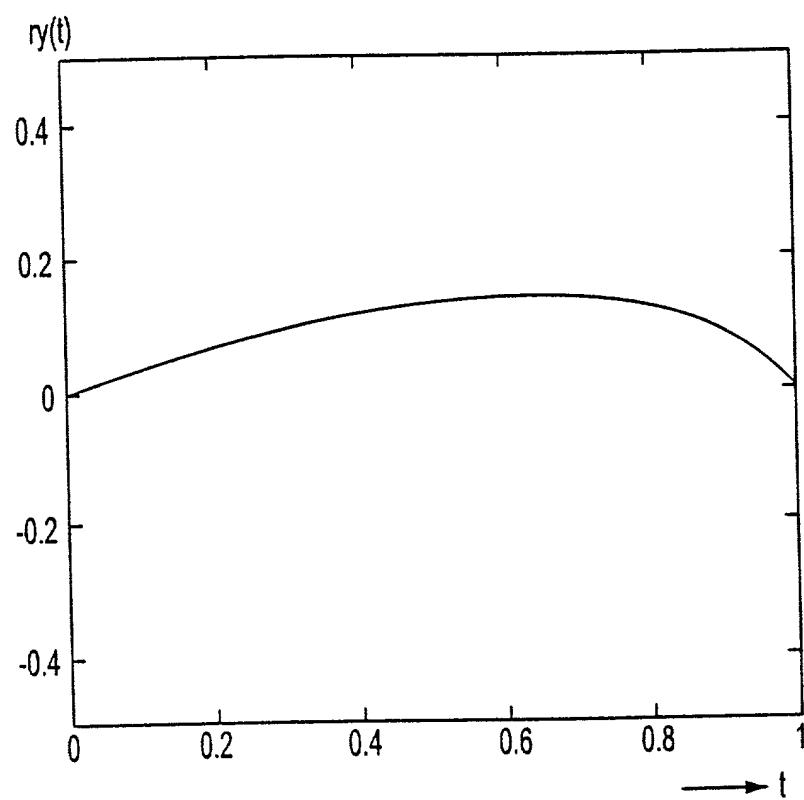


FIG. 13B

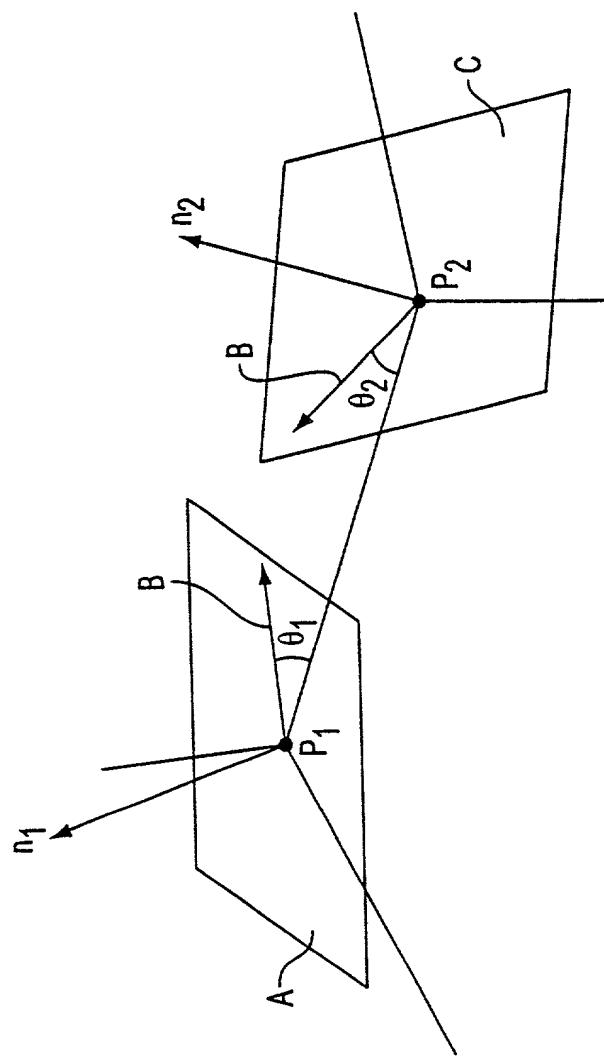


FIG. 14

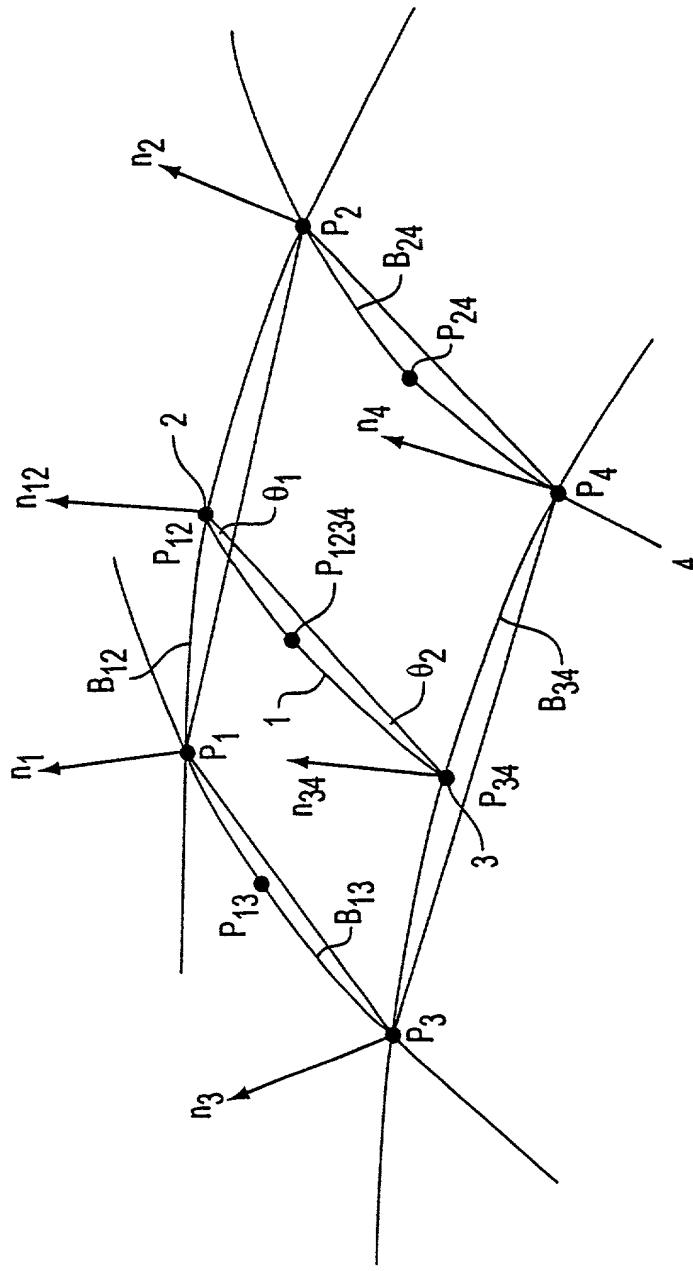


FIG. 15

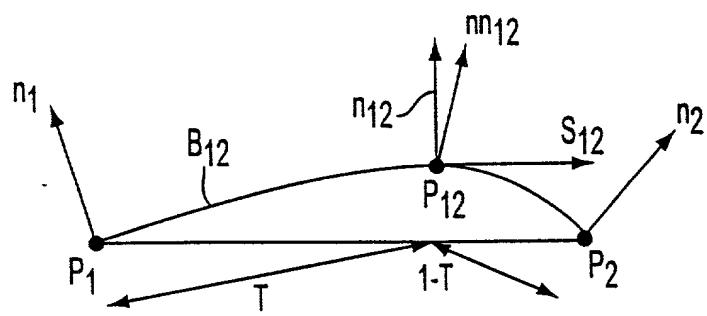


FIG. 16

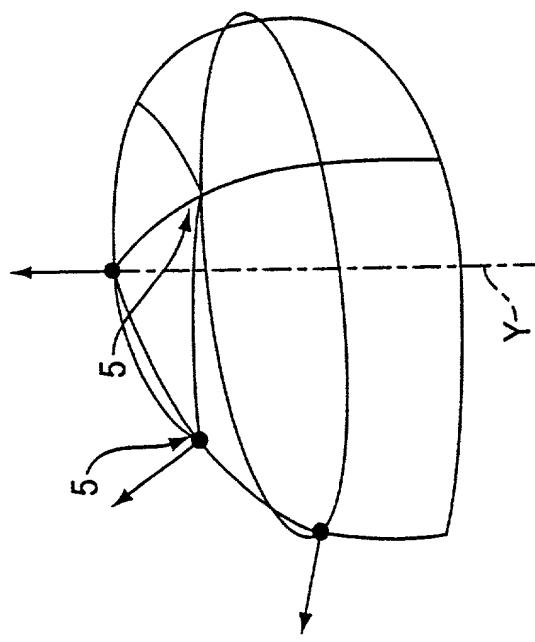


FIG. 17(B)

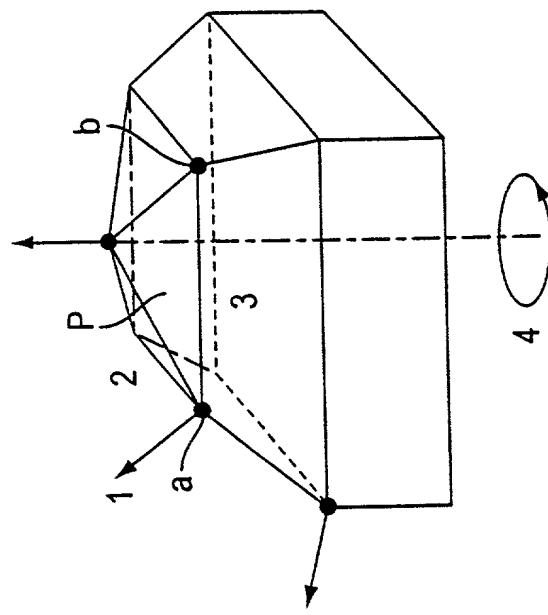


FIG. 17(A)

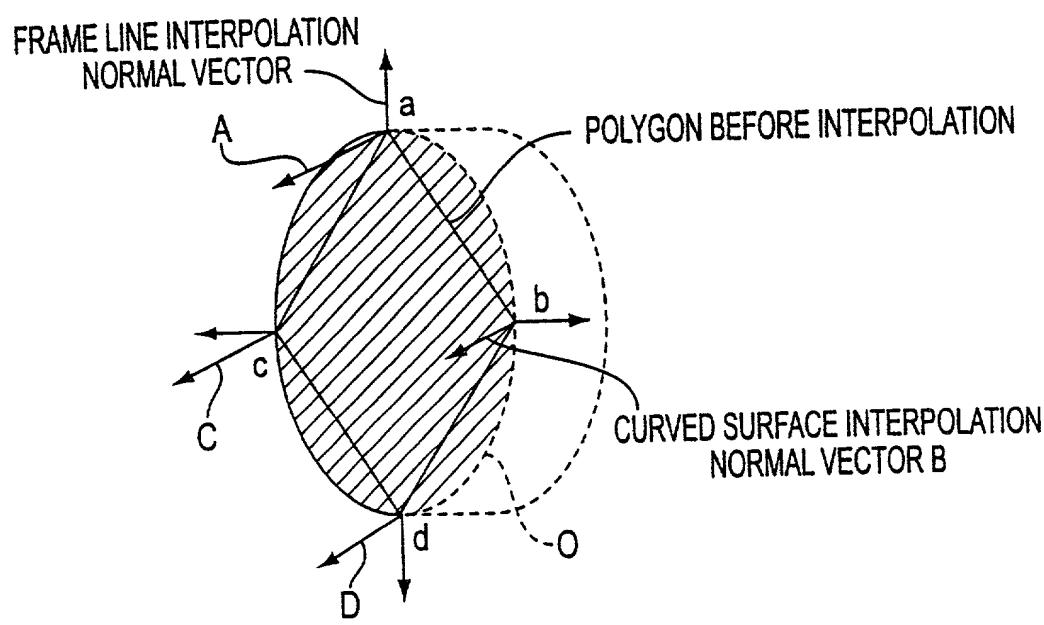


FIG. 18

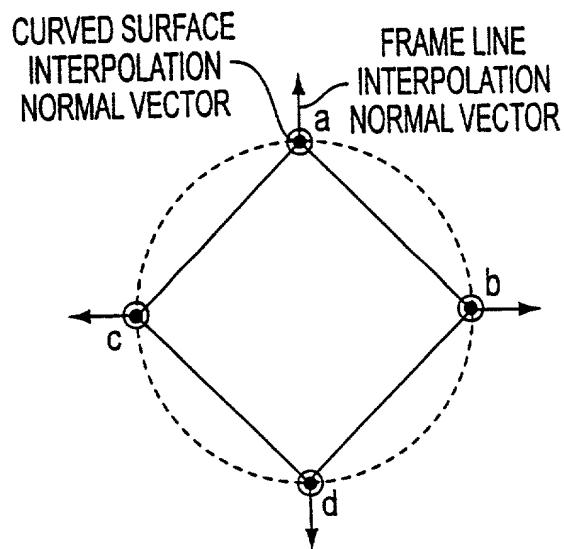


FIG. 19(A)

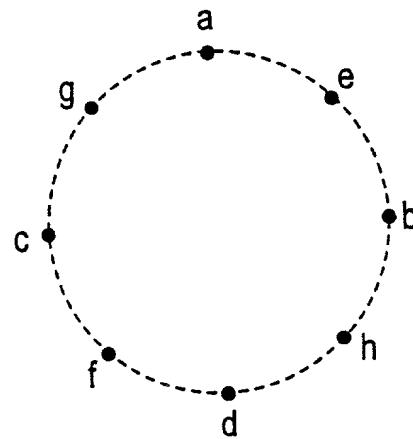


FIG. 19(C)

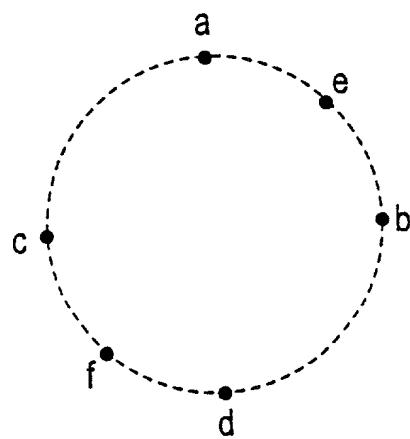


FIG. 19(B)

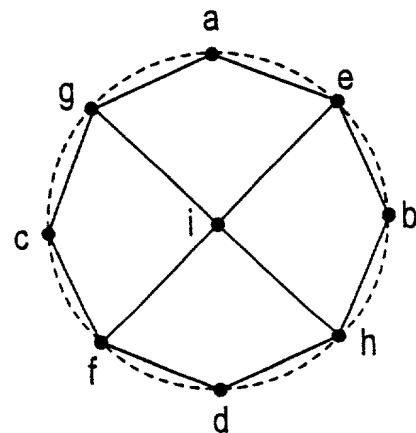


FIG. 19(D)

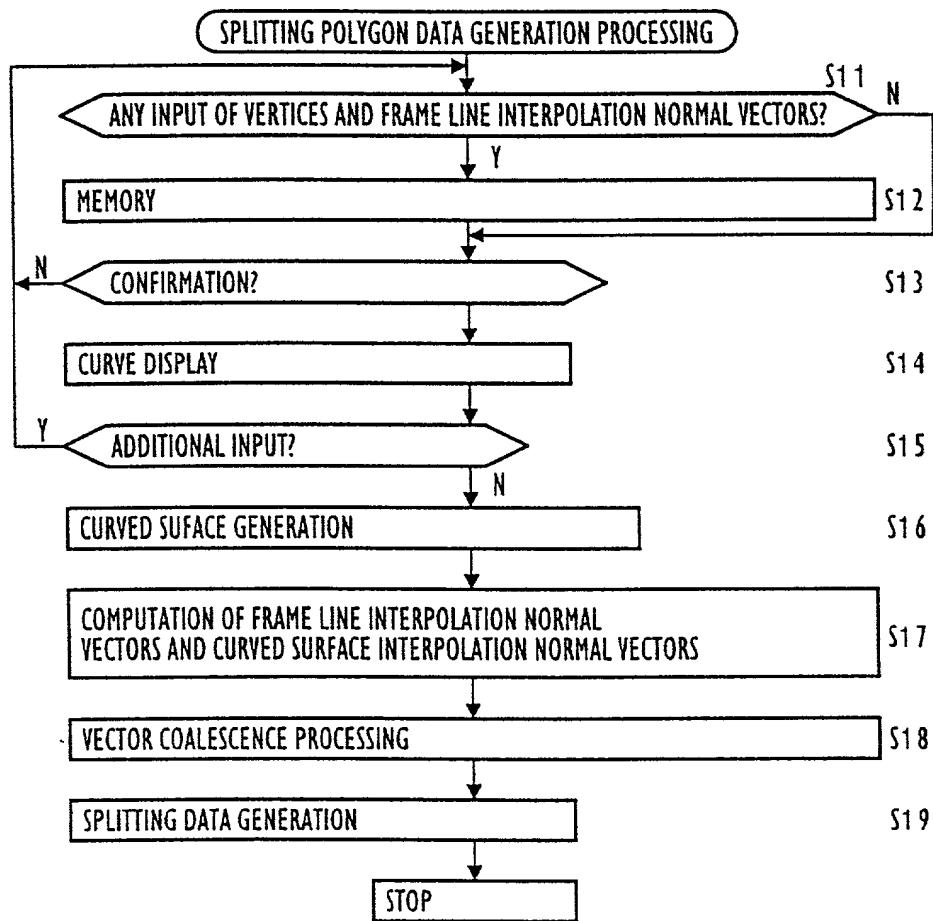


FIG. 20

THE 2000 EDITION

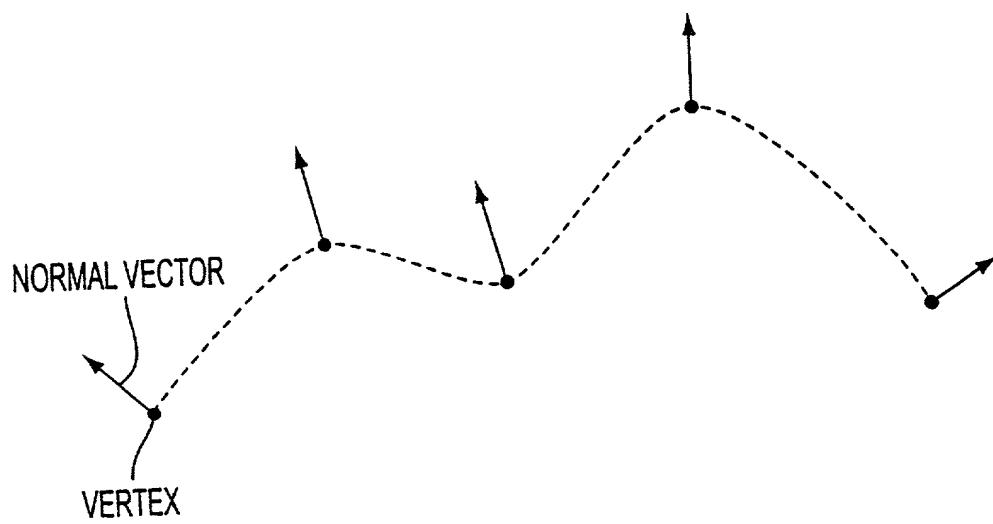


FIG. 21

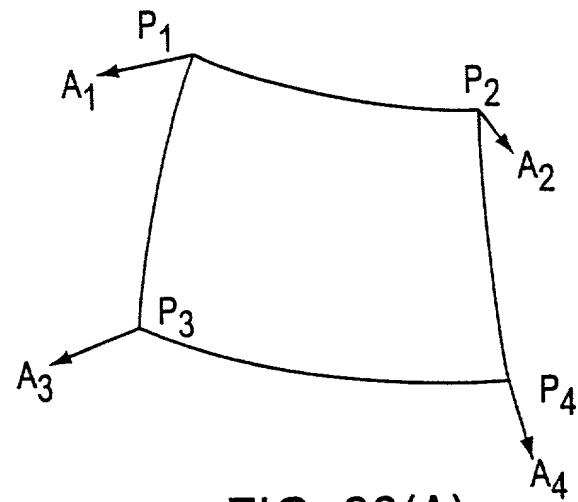


FIG. 22(A)

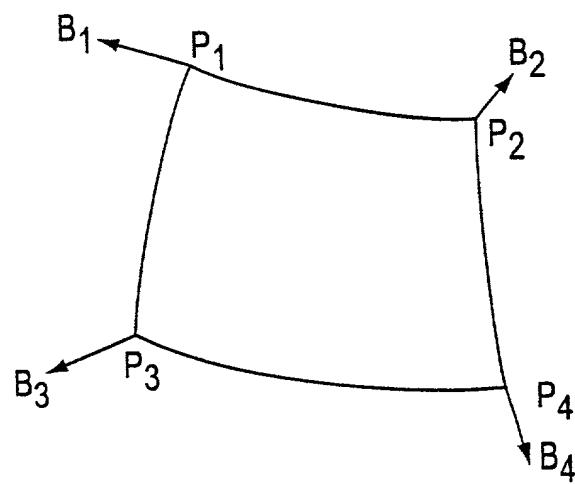


FIG. 22(B)

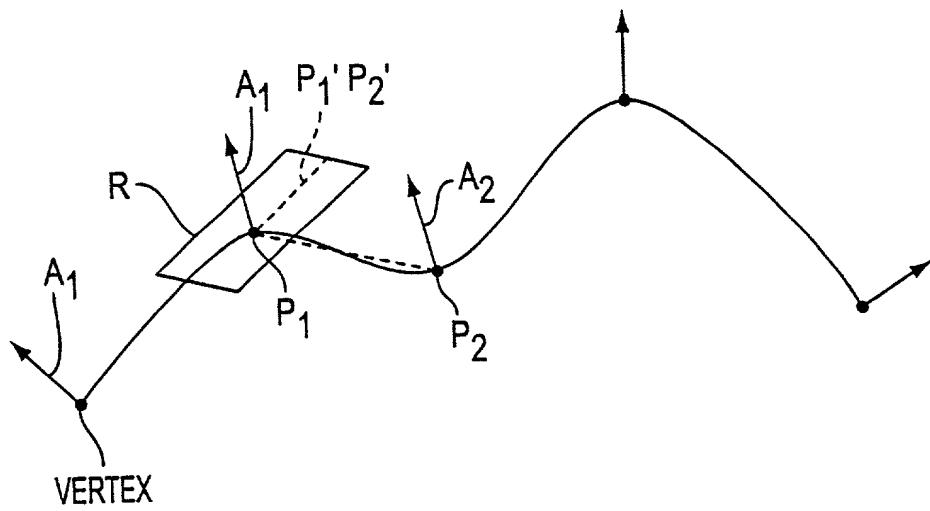


FIG. 23

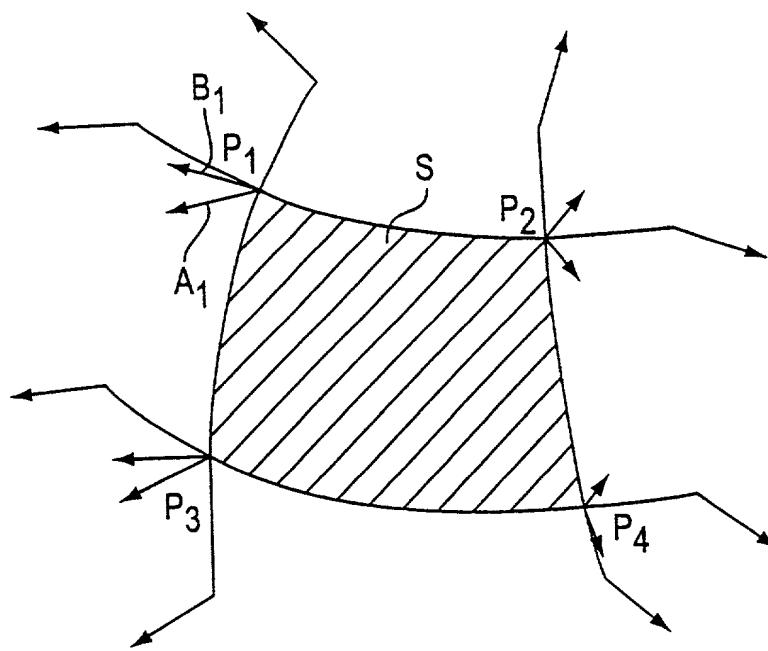


FIG. 24

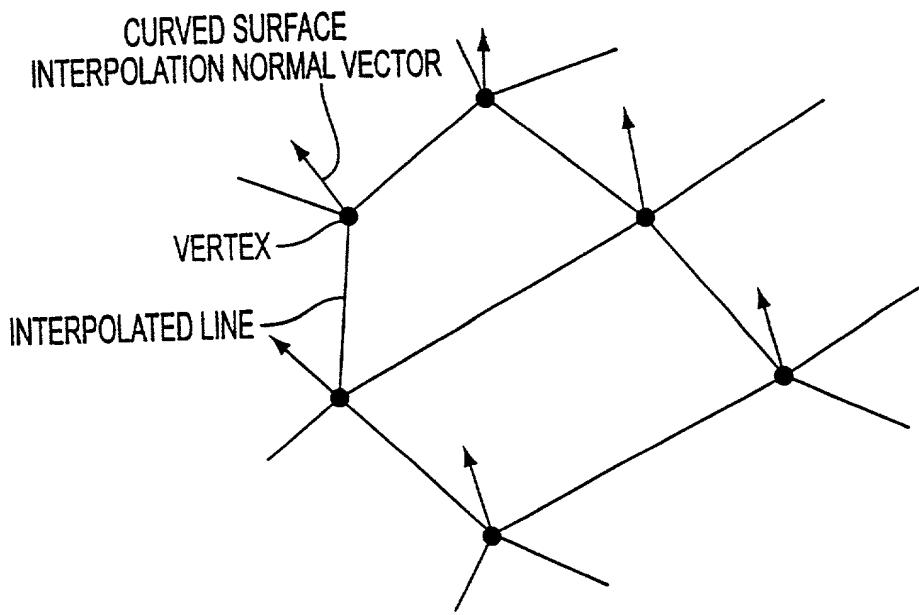


FIG. 25(A)

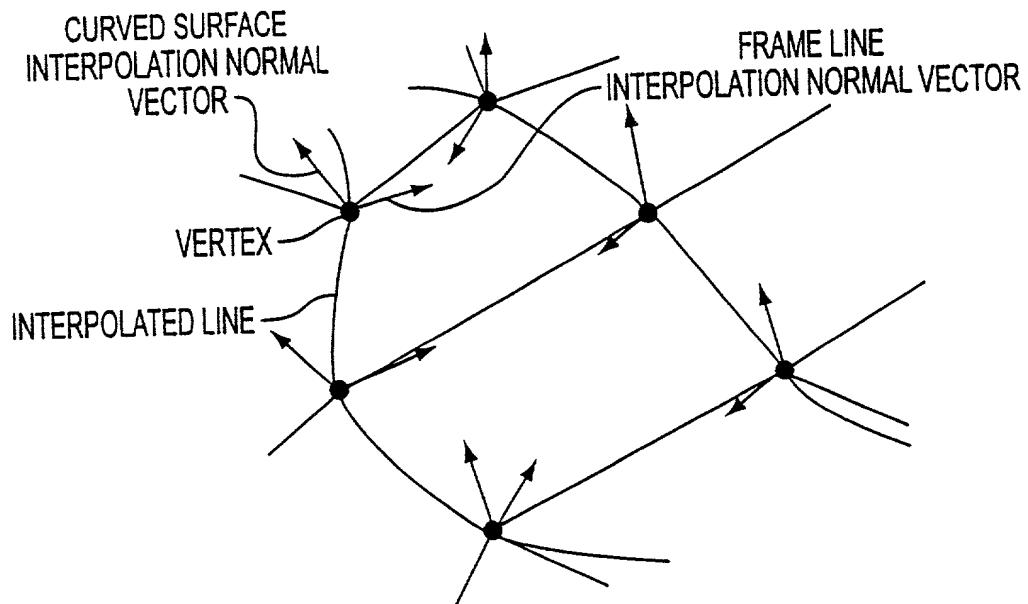


FIG. 25(B)

1	REFERENCE DATA	2	3	4	5
#1	#2	...	#i	...	POLYGON DATA #1

FIG. 26A

6 COORDINATES OF VERTICES	7	NORMAL VECTORS
$(px_1)$ $(py_1)$ $(pz_1)$	$(px_2)$ $(py_2)$ $(pz_2)$	$(px_3)$ $(py_3)$ $(pz_3)$

$(nx_1)$ $(ny_1)$ $(nz_1)$	$(nx_2)$ $(ny_2)$ $(nz_2)$	$(nx_3)$ $(ny_3)$ $(nz_3)$
...	...	...

1	2	3
...	...	...
1	2	3

FIG. 26B

10	11	12	13
NUMBER OF VERTICES	REFERENCE DATA FOR VERTEX #1	REFERENCE DATA FOR VERTEX #2	REFERENCE DATA FOR VERTEX #i

FIG. 26C

14	15	16	17
INDEX OF COORDINATES	INDEX OF INTERPOLATION VECTOR A	INDEX OF INTERPOLATION VECTOR B	INDEX OF CURVED SURFACE INTERPOLATION NORMAL VECTOR

FIG. 26D

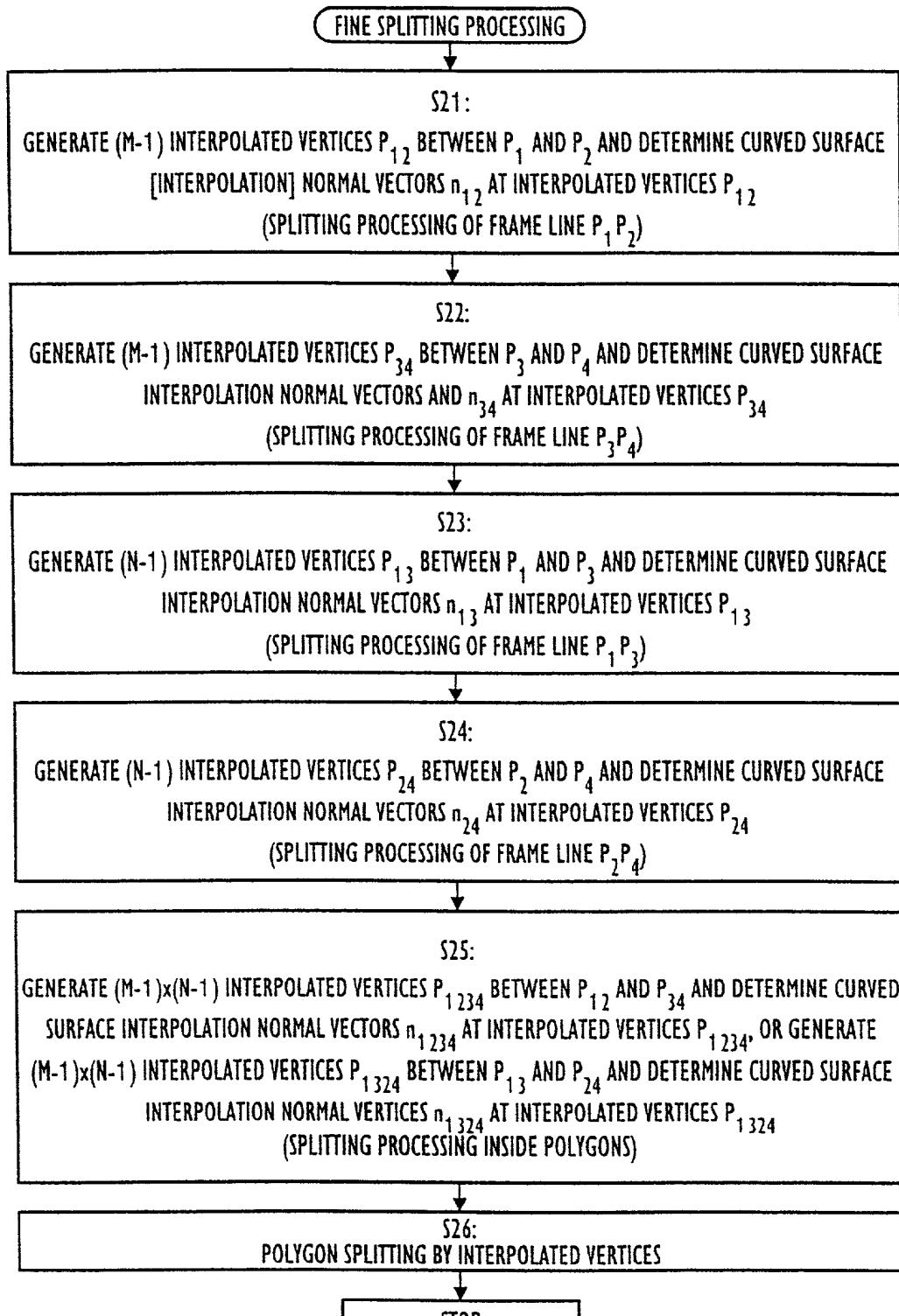


FIG. 27

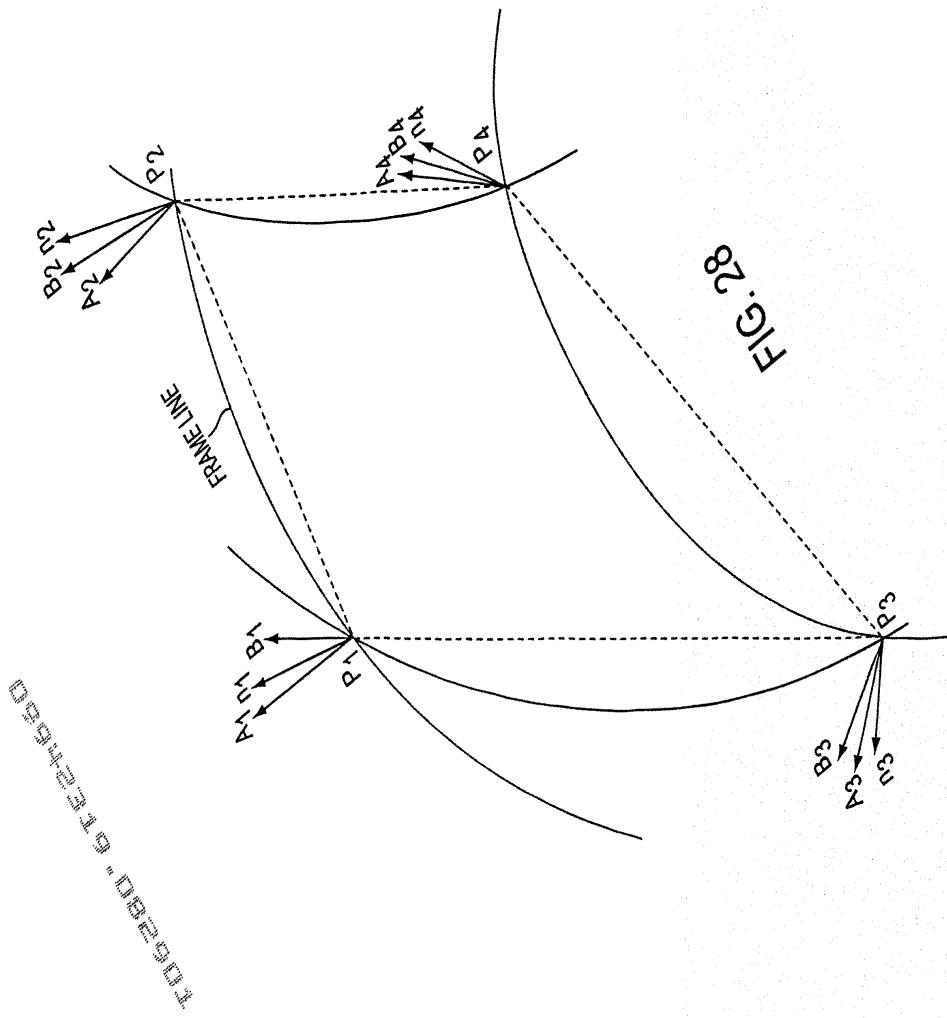


FIGURE 29. STATE DIAGRAM

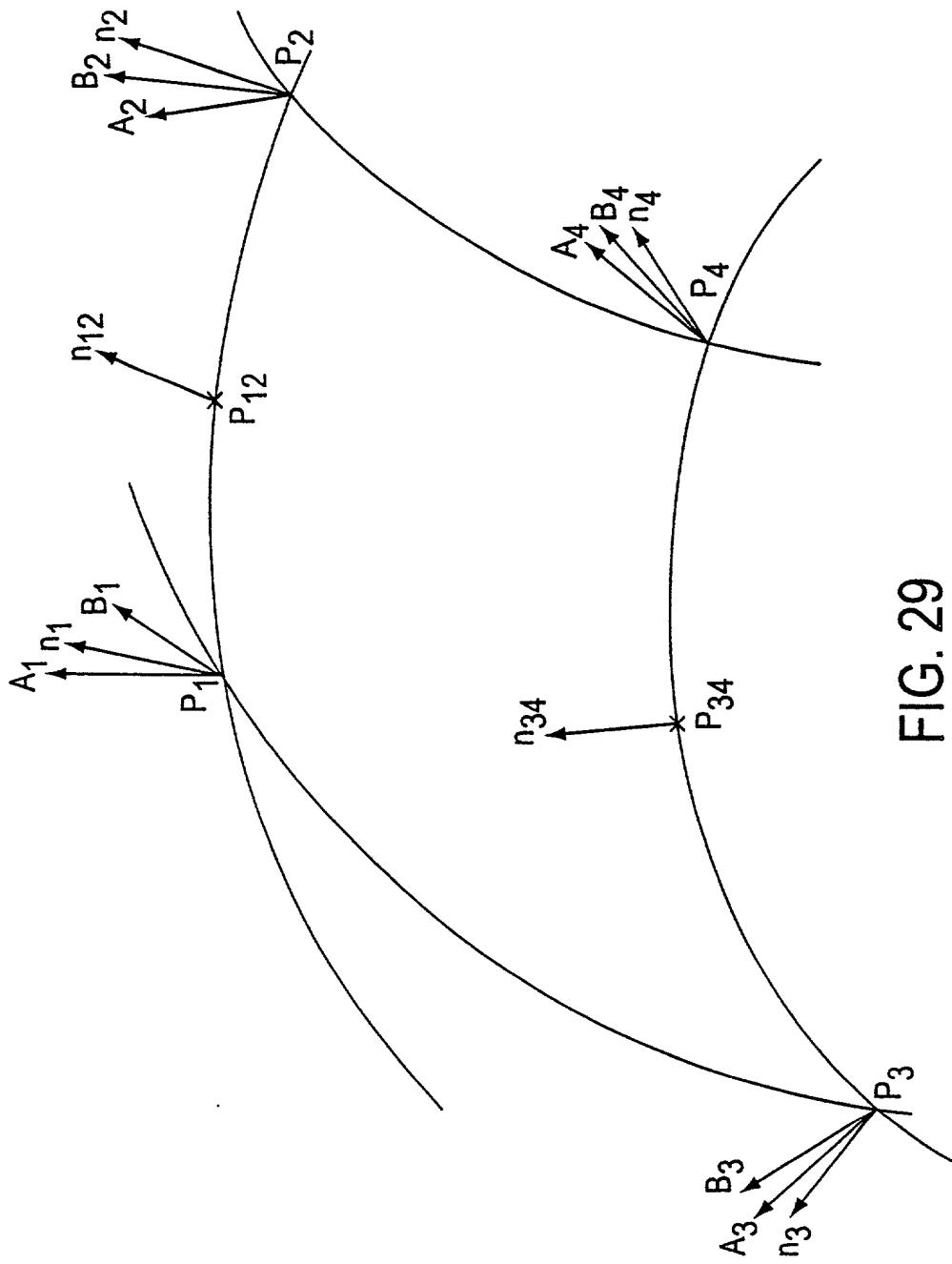


FIG. 29

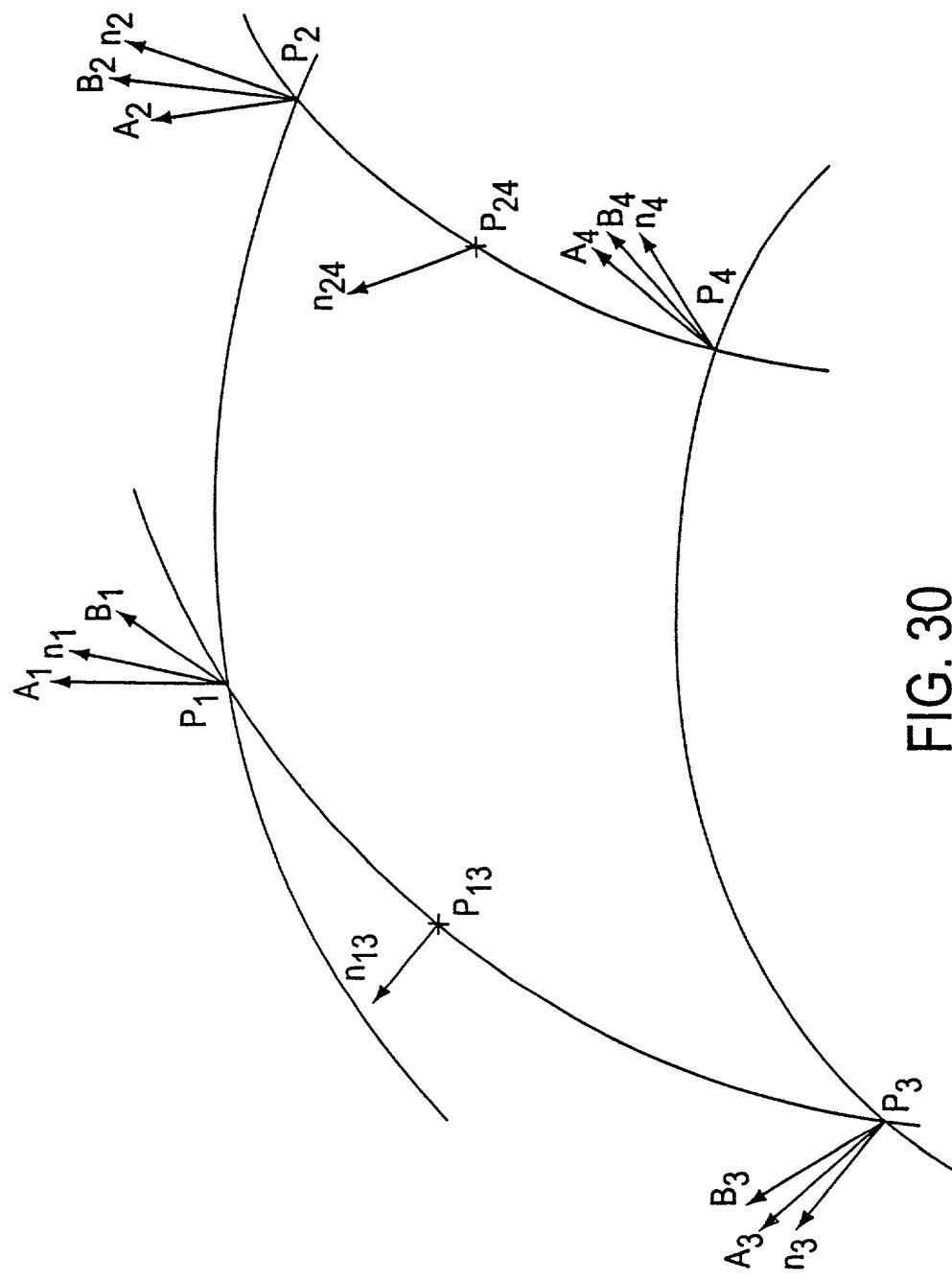
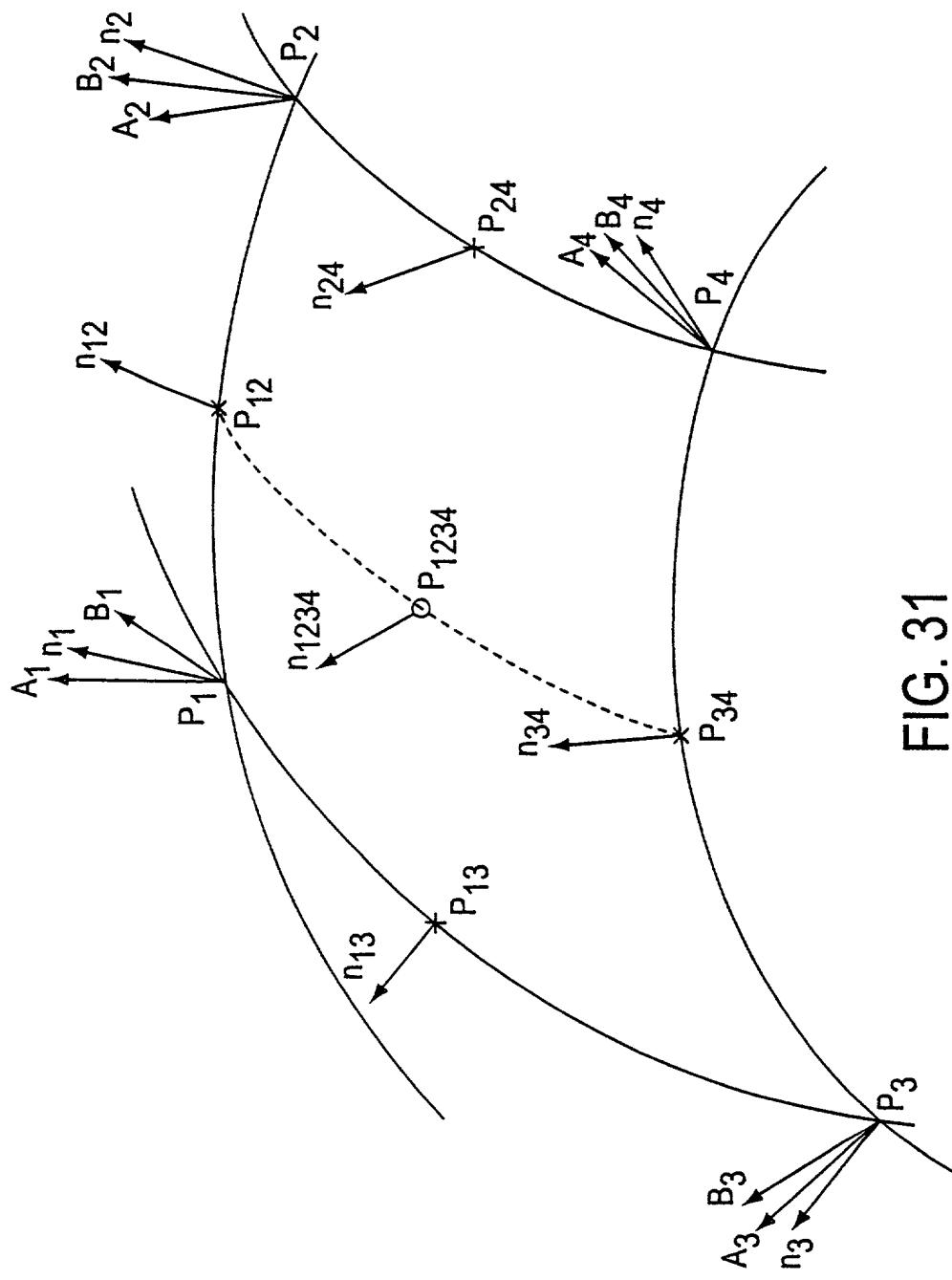


FIG. 30

FIG. 31



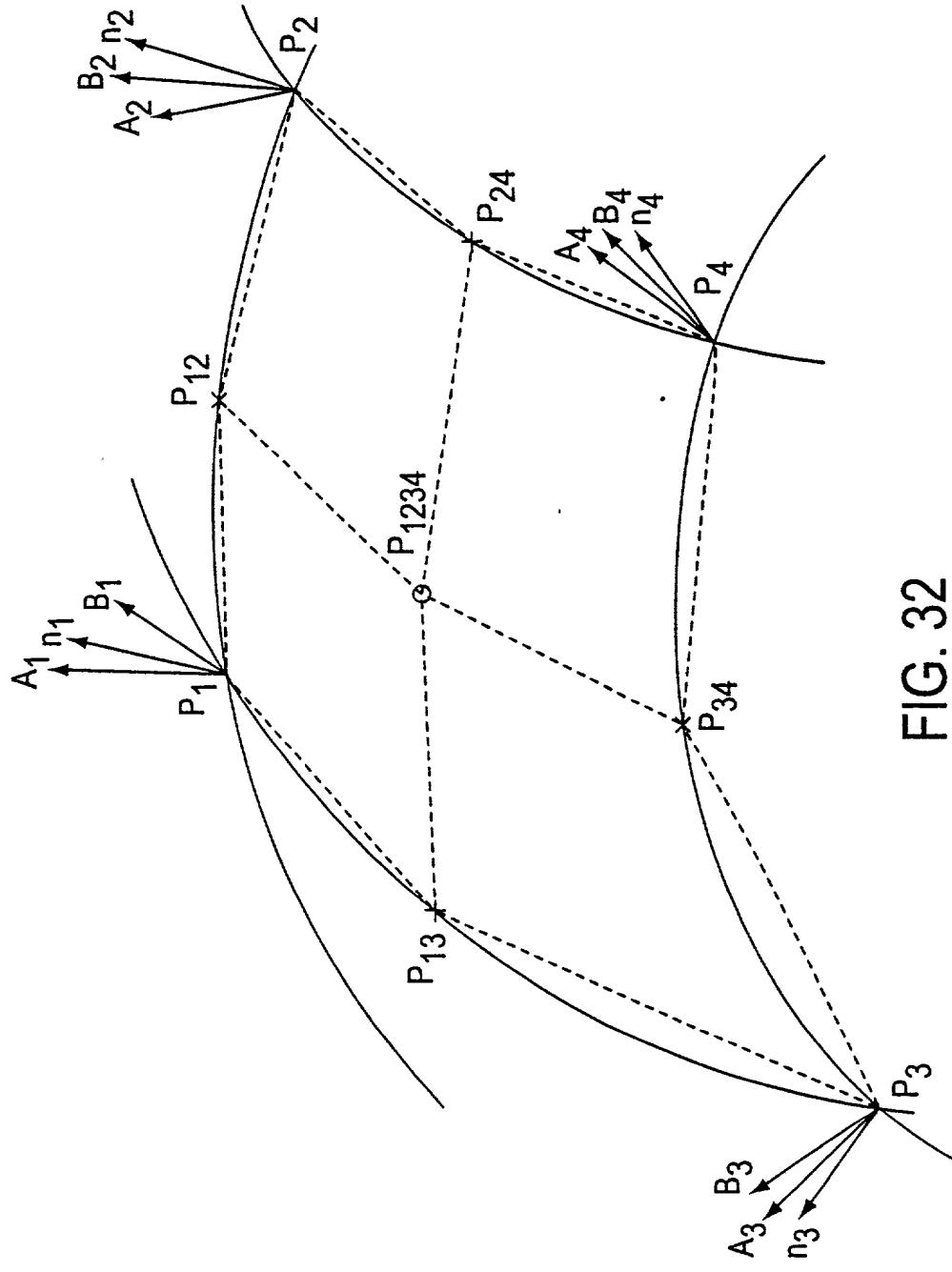
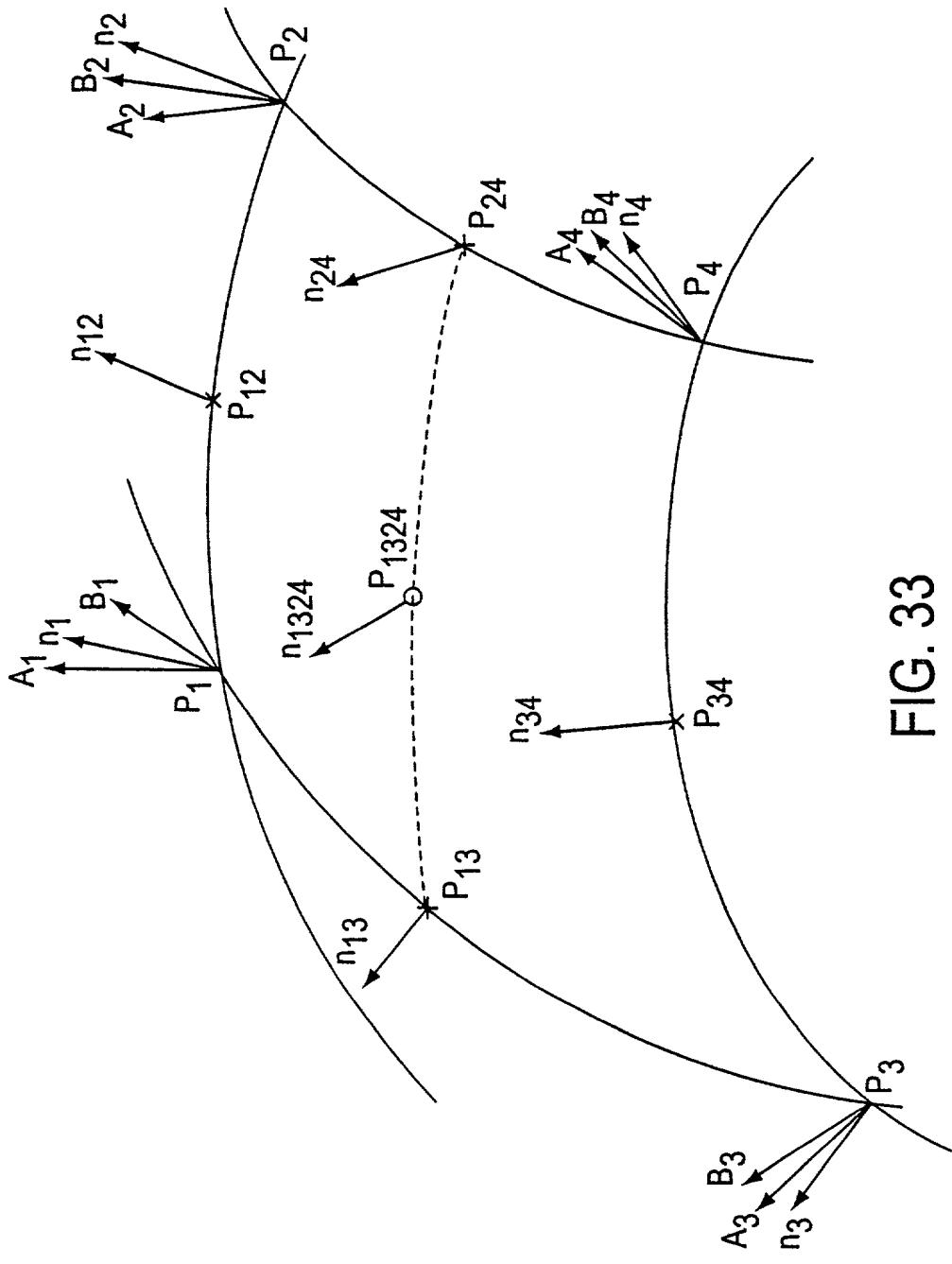


FIG. 32

FIG. 33



## SPLITTING PROCESSING OF FRAME LINES

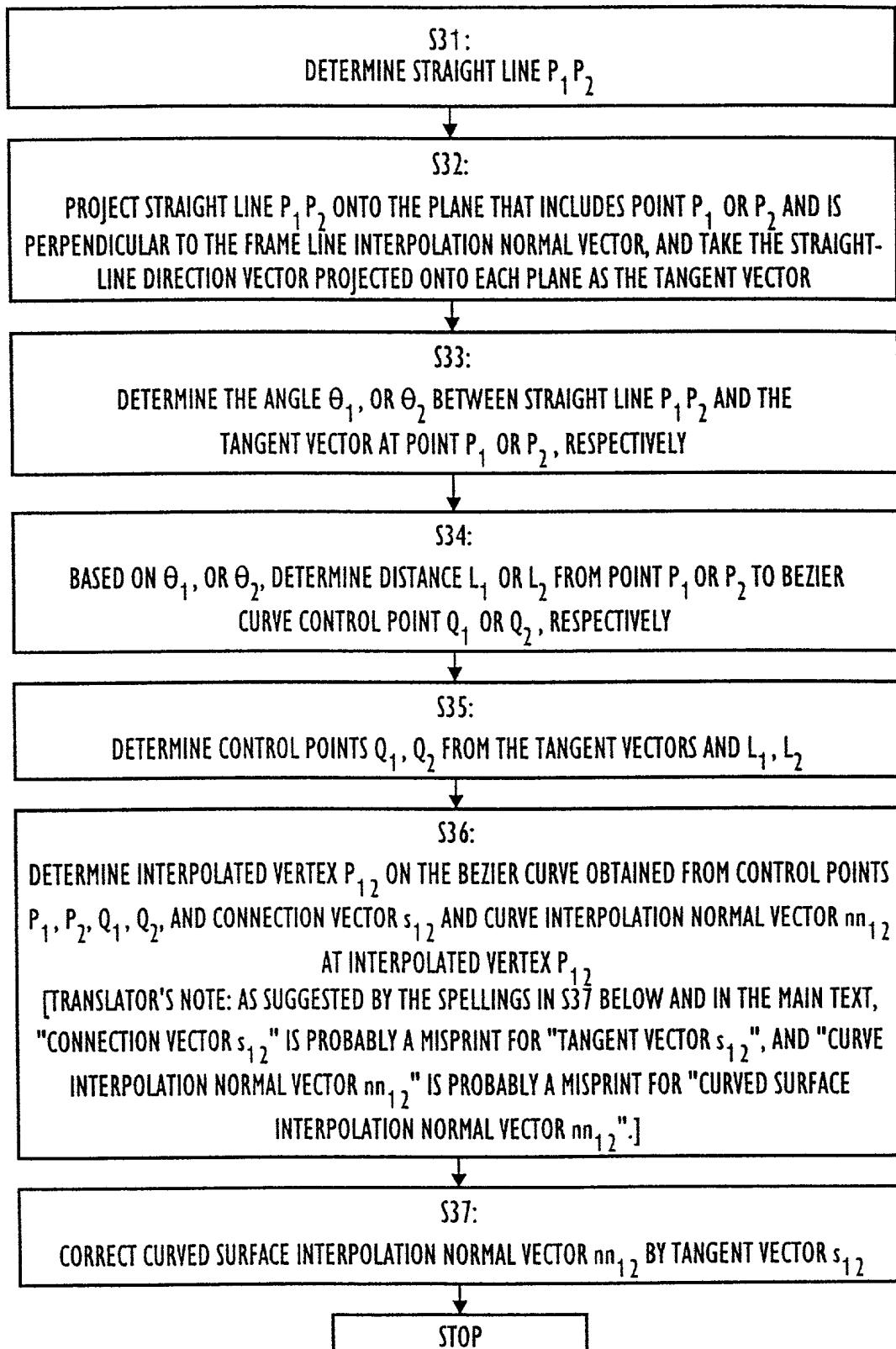


FIG. 34

## SPLITTING PROCESSING WITHIN POLYGONS

S41:  
DETERMINE STRAIGHT LINE  $P_1 P_2$

S42:

PROJECT STRAIGHT LINE  $P_1 P_2$  ONTO THE PLANE THAT INCLUDES POINT  $P_1$  OR  $P_2$  AND IS PERPENDICULAR TO THE CURVED SURFACE INTERPOLATION NORMAL VECTOR, AND TAKE THE STRAIGHT-LINE DIRECTION VECTOR PROJECTED ONTO EACH PLANE AS THE TANGENT VECTOR

S43:

DETERMINE THE ANGLE  $\theta_1$  OR  $\theta_2$  BETWEEN STRAIGHT LINE  $P_1 P_2$  AND THE TANGENT VECTOR AT POINT  $P_1$  OR  $P_2$ , RESPECTIVELY

S44:

BASED ON  $\theta_1$ , OR  $\theta_2$ , DETERMINE DISTANCE  $L_1$  OR  $L_2$  FROM POINT  $P_1$  OR  $P_2$  TO BEZIER CURVE CONTROL POINT  $Q_1$  OR  $Q_2$ , RESPECTIVELY

S45:

DETERMINE CONTROL POINTS  $Q_1$ ,  $Q_2$  FROM THE TANGENT VECTORS AND  $L_1$ ,  $L_2$

S46:

DETERMINE INTERPOLATED VERTEX  $P_{12}$  ON THE BEZIER CURVE OBTAINED FROM CONTROL POINTS  $P_1$ ,  $P_2$ ,  $Q_1$ ,  $Q_2$ , AND CONNECTION VECTOR  $s_{12}$  AND CURVE INTERPOLATION NORMAL VECTOR  $nn_{12}$  AT INTERPOLATED VERTEX  $P_{12}$

[TRANSLATOR'S NOTE: AS SUGGESTED BY THE SPELLINGS IN S47 BELOW AND IN THE MAIN TEXT, "CONNECTION VECTOR  $s_{12}$ " IS PROBABLY A MISPRINT FOR "TANGENT VECTOR  $s_{12}$ ", AND "CURVE INTERPOLATION NORMAL VECTOR  $nn_{12}$ " IS PROBABLY A MISPRINT FOR "CURVED SURFACE INTERPOLATION NORMAL VECTOR  $nn_{12}$ ".]

S47:

CORRECT CURVED SURFACE INTERPOLATION NORMAL VECTOR  $nn_{12}$  BY TANGENT VECTOR  $s_{12}$

STOP

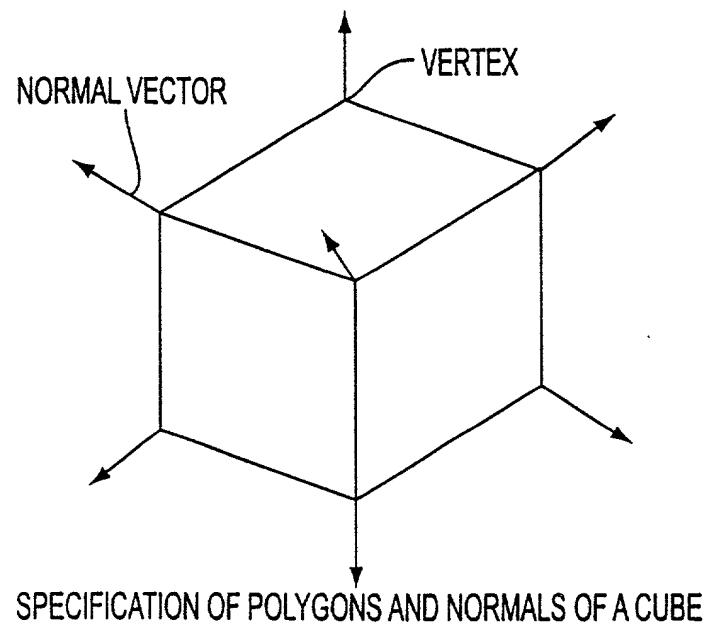


FIG. 36

卷之三

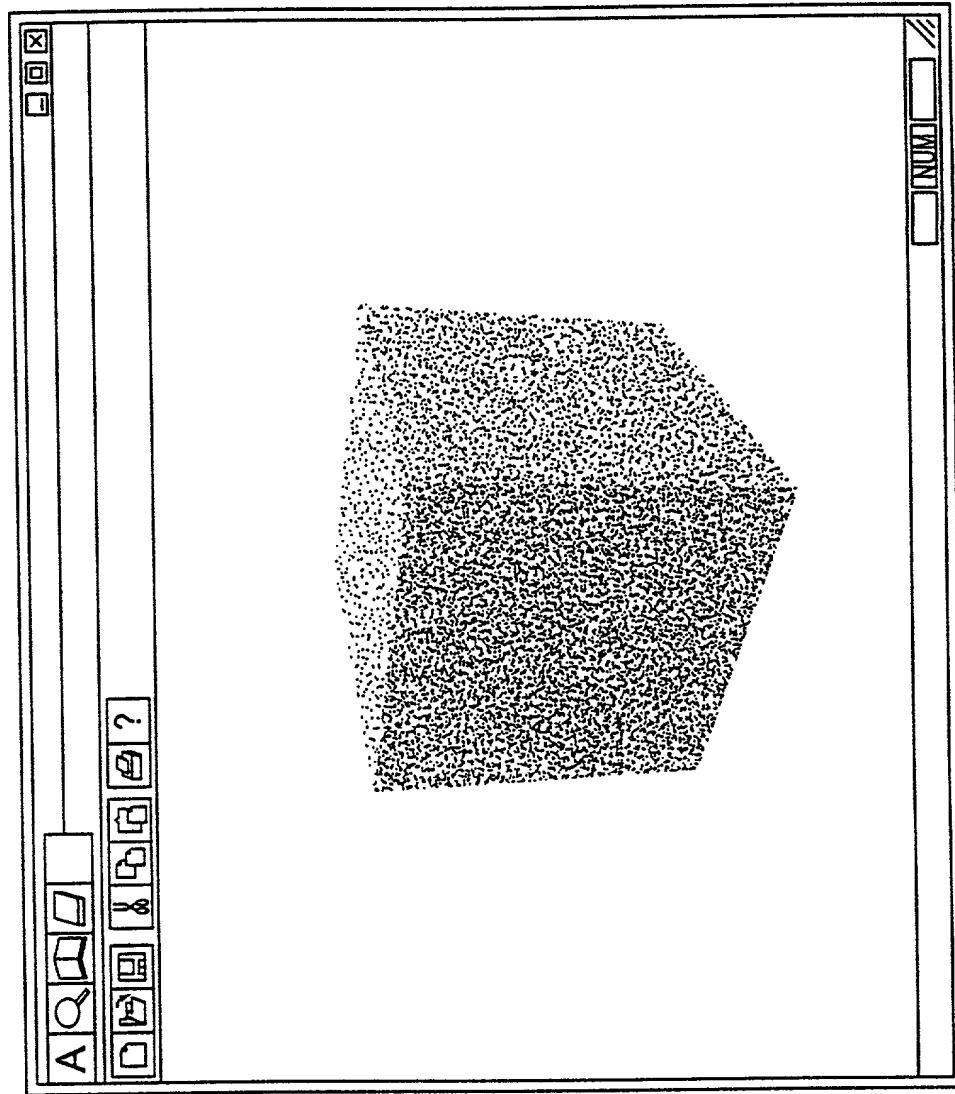


FIG. 37

FIGURE 38

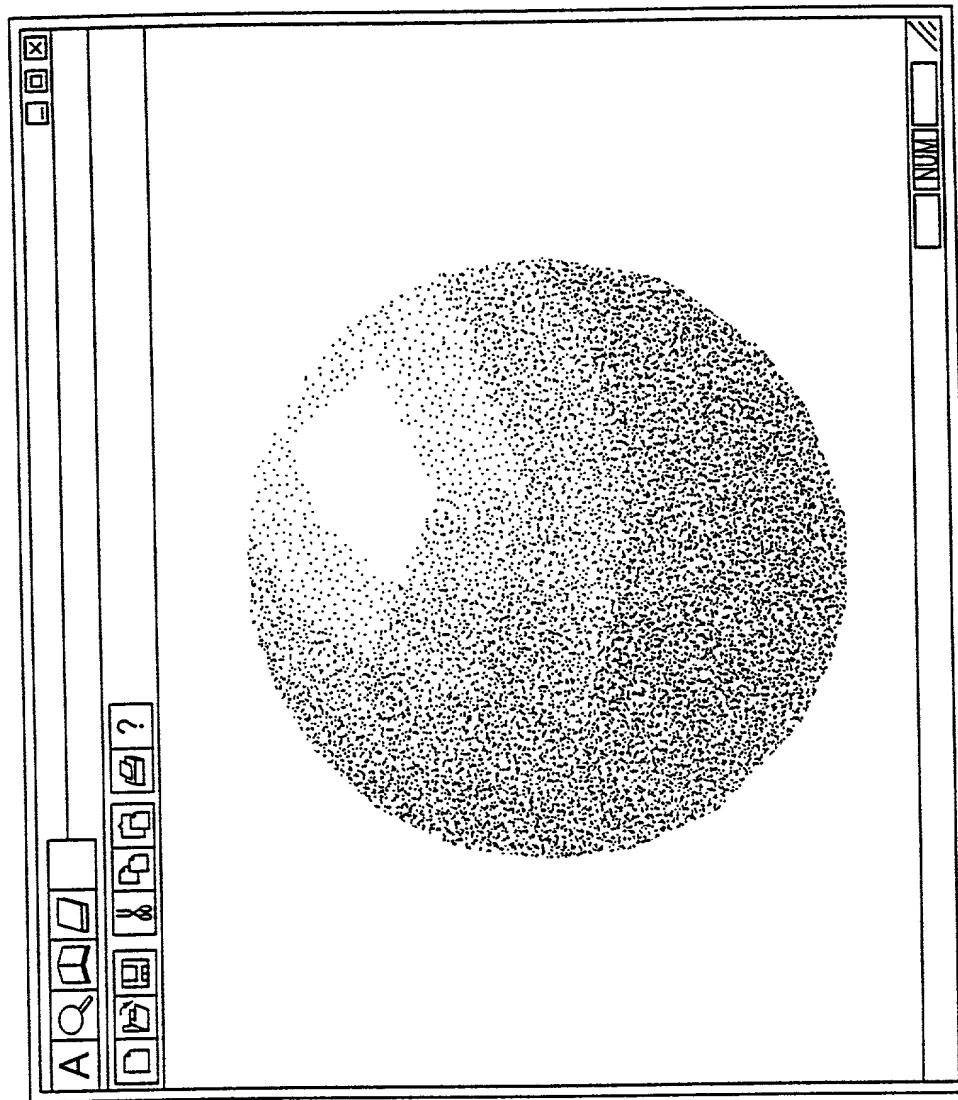


FIG. 38

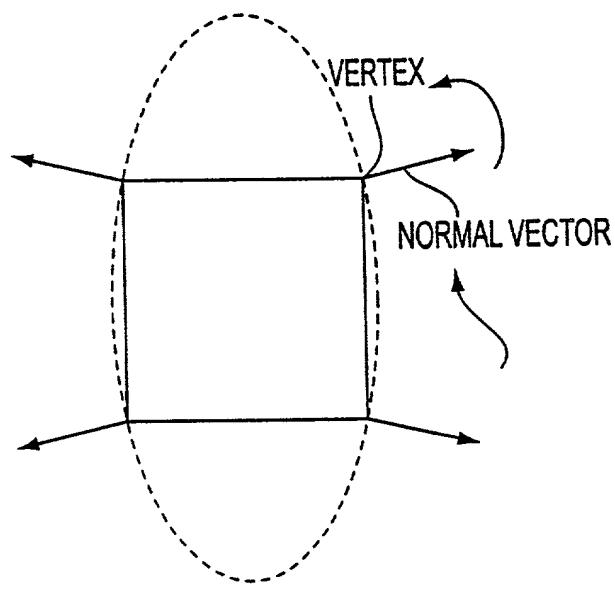
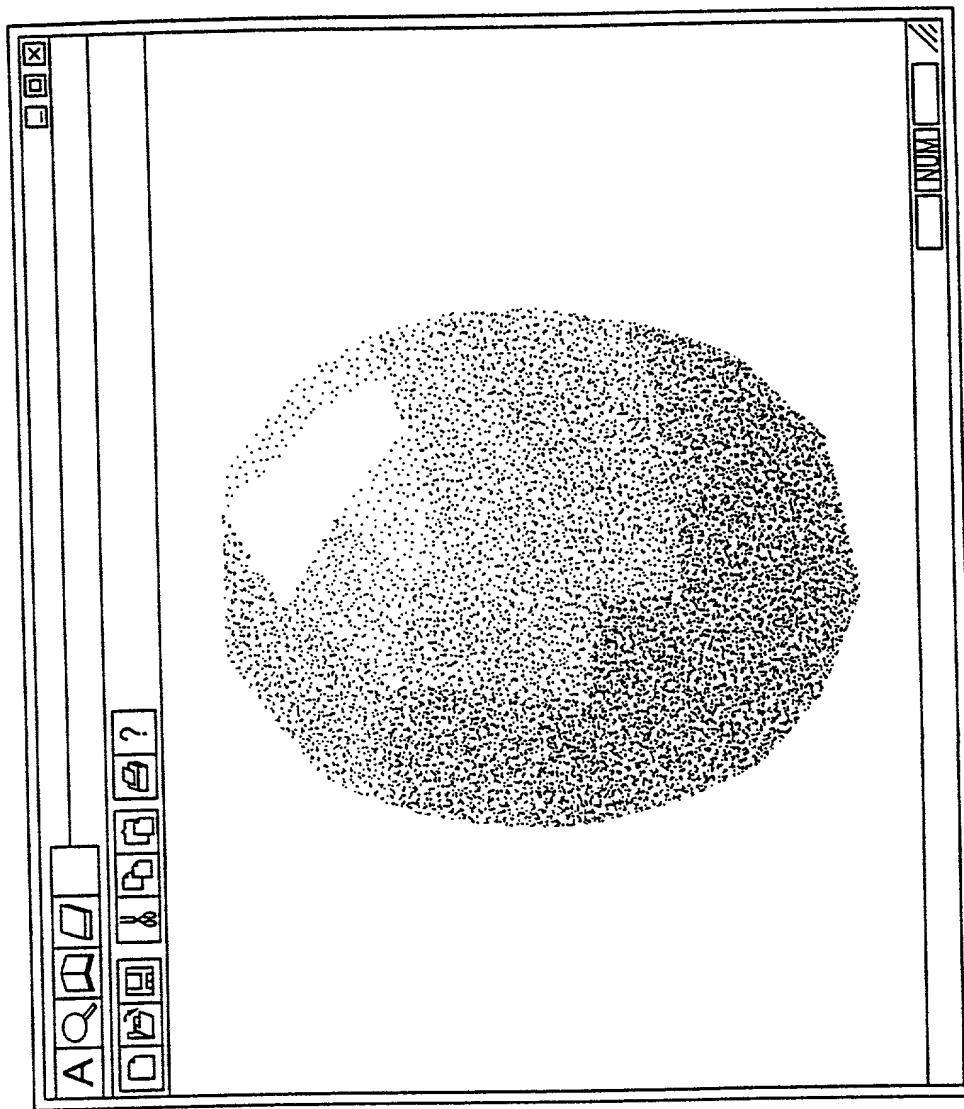


FIG. 39

FIG. 40



TOESEG "STEENGO

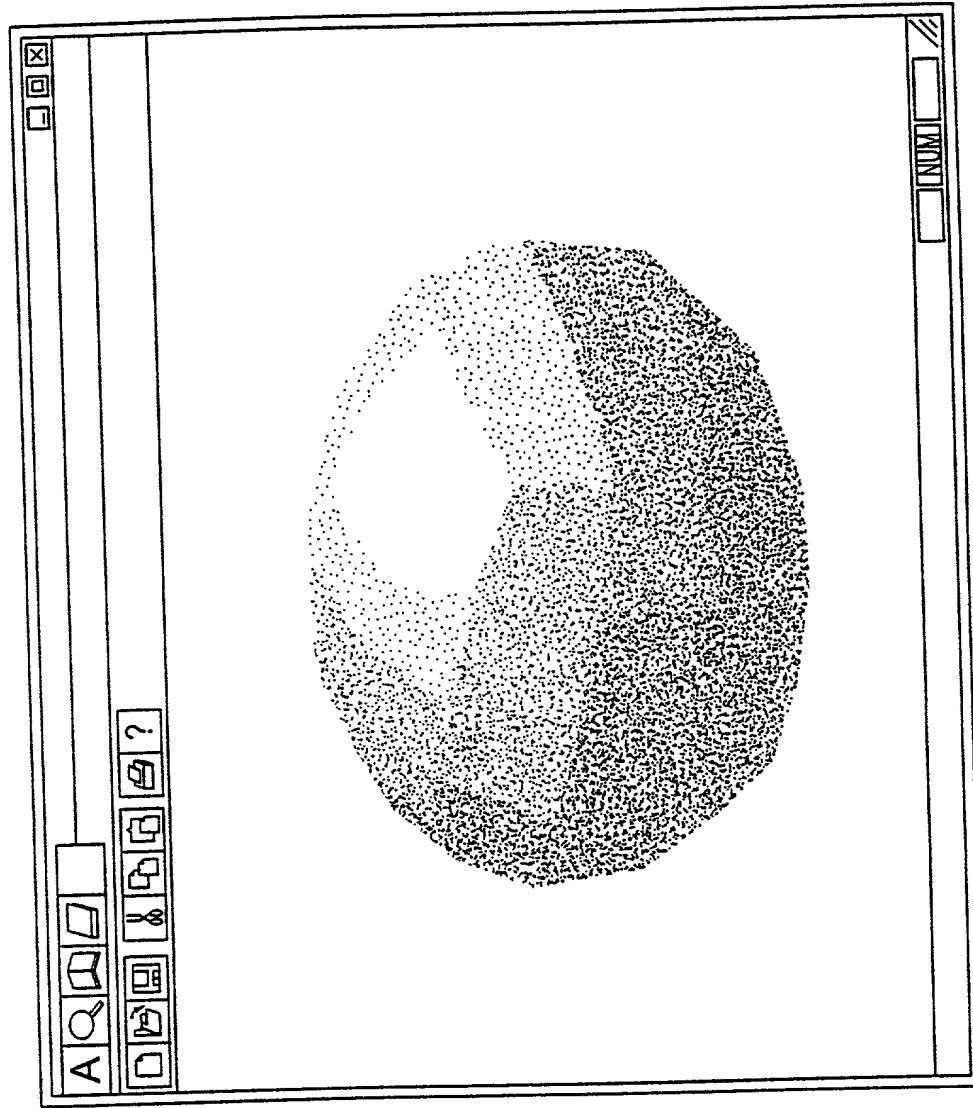


FIG. 41

## தோசோ க்ரெடிட் கோ

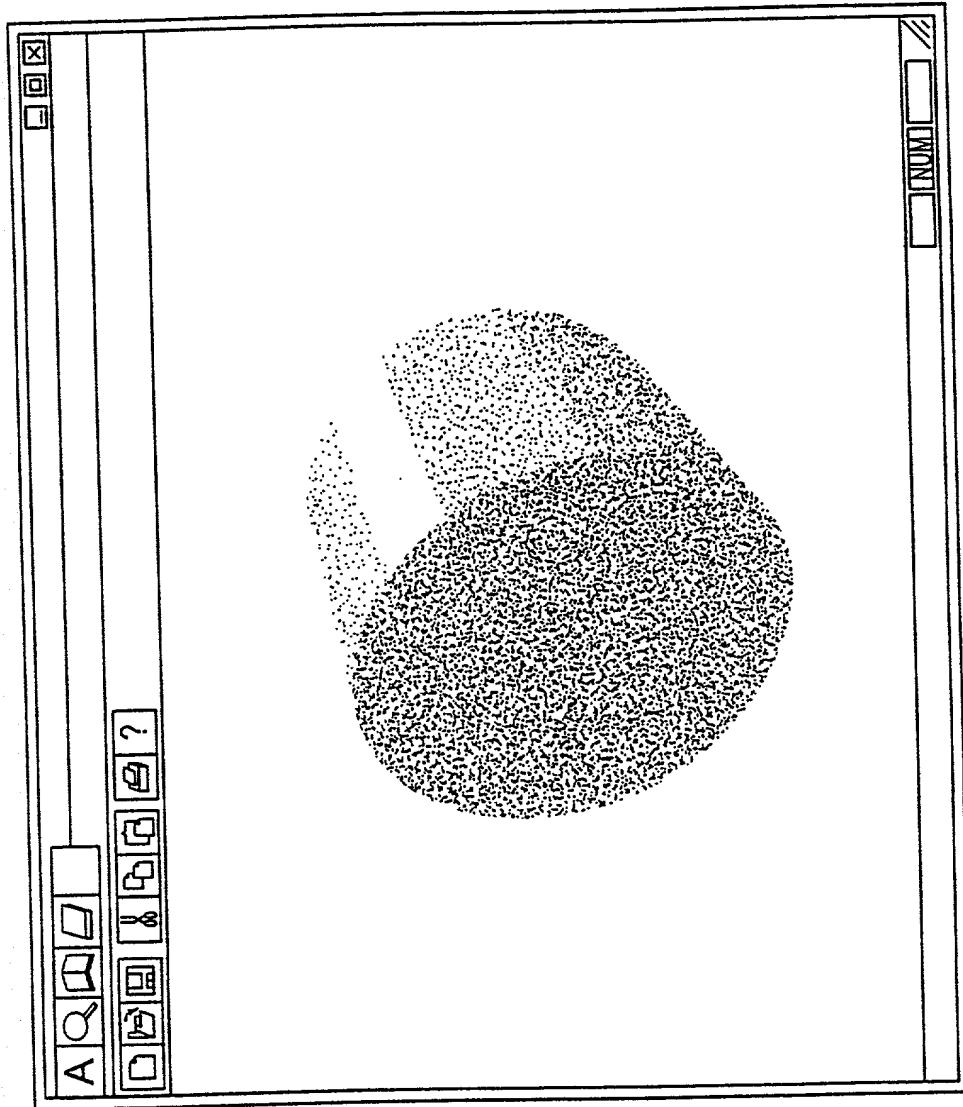


FIG. 42

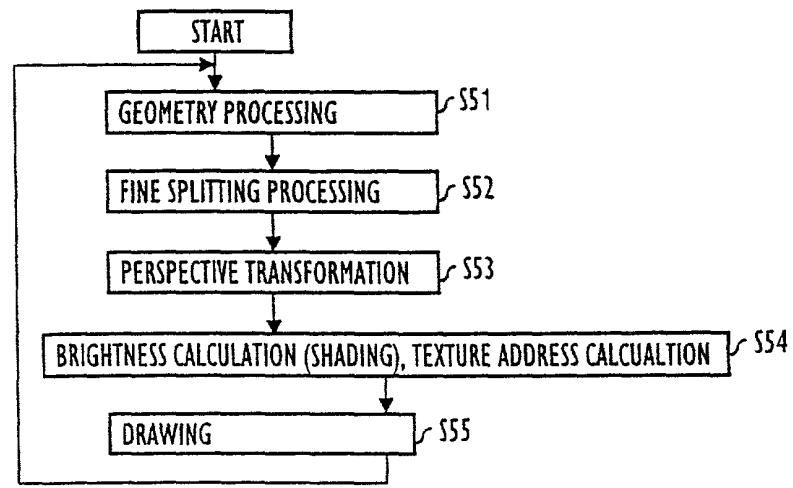


FIG. 43

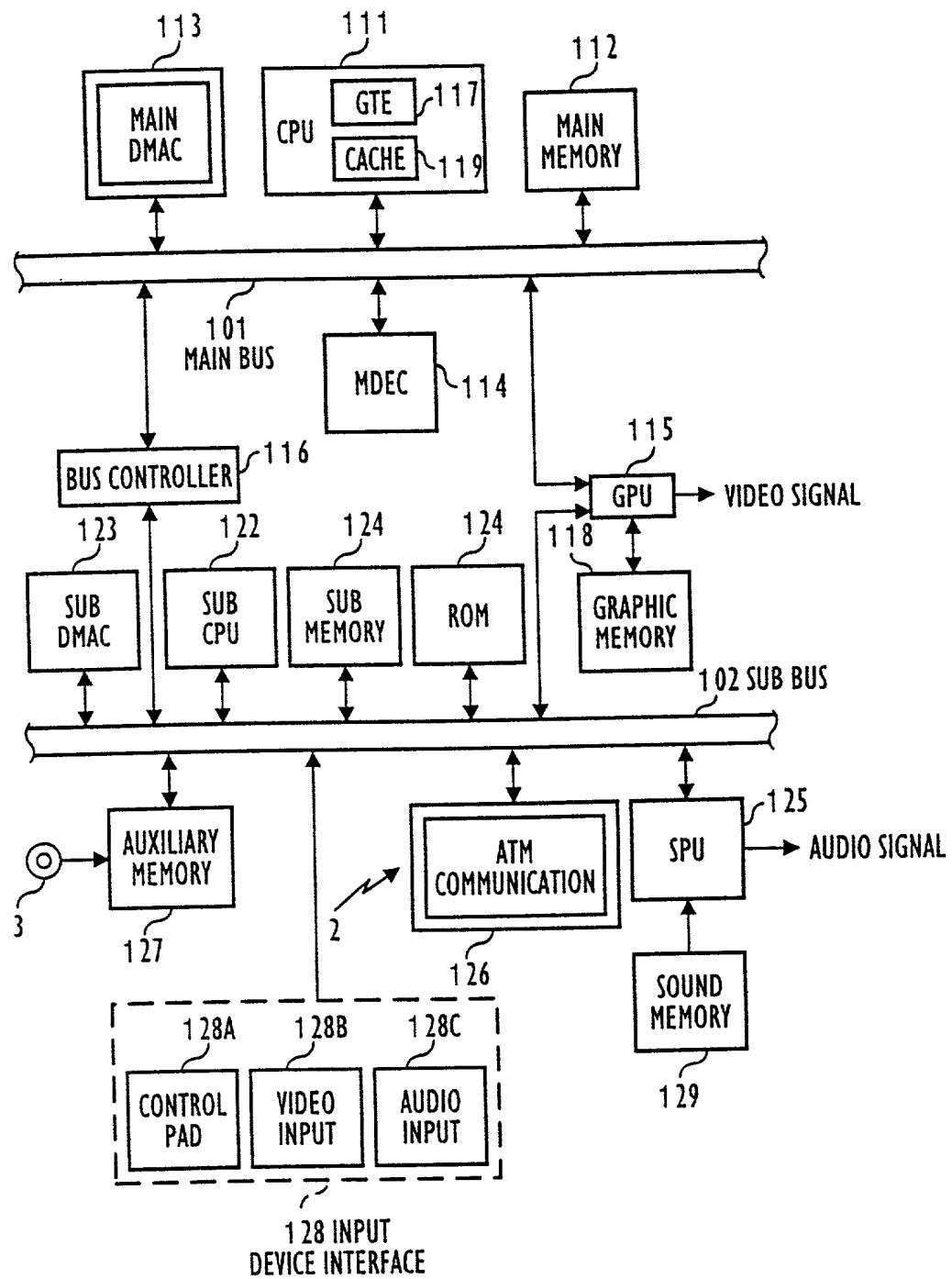


FIG. 44

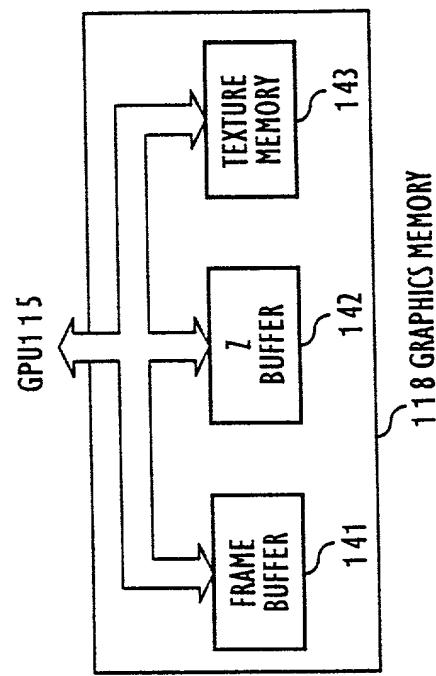


FIG. 45